Consumers Union

AUGUST 1941

VOL. 6. NO. 8

HOW TO SAVE ON HEATING FUELS

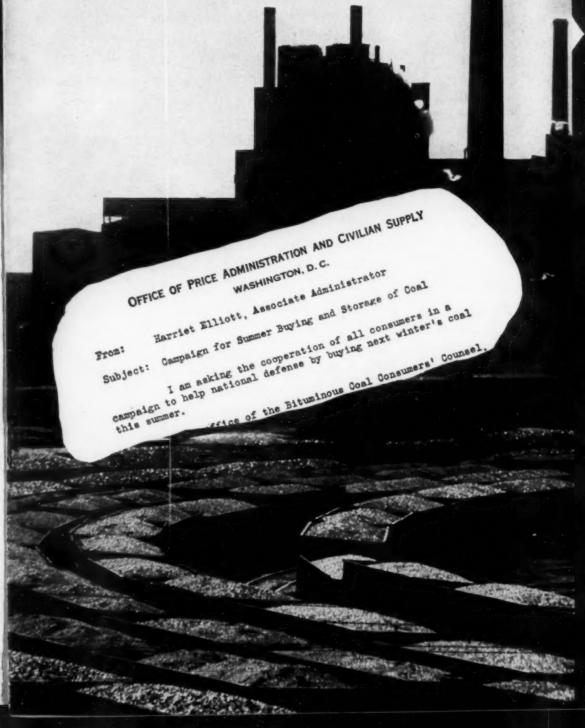
PIPE TOBACCO

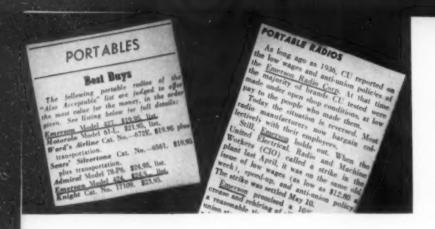
NEW PORTABLE Typewriters

IS FROZEN FOOD A GOOD BUY

SHORTENINGS

MEN'S SHORTS & UNDERSHIRTS





Nothing Influences Our Ratings Except . . .

T IS necessary to clear up once more a misconception about CU that we have tried to clear up a number of times already. This time we will do the job straight from the shoulder and with no trimmings.

We are, to tell the truth, plain fed up with the loose talk and worse which apparently is aimed to undermine CU's reputation.

What puts us in this mood is a letter from a member which came in a few days ago. It tells about a salesman who said that CU gave his product a bad rating because CU didn't like the labor policies of the company which makes the product.

In answer to this, we say first of all that the salesman, if he said what he is represented as saying, told a plain lie, either out of irresponsible ignorance or deliberate malice. We have asked the member who wrote us to get the salesman to put what he said into writing and sign it. If he does, we shall take him into court.

We say further that no rating ever published by CU was ever in any way influenced, either directly or indirectly, by any consideration except the technical merits or demerits of the product as determined by unbiased technical test, examination or expert opinion.

The labor conditions under which a product is made have never had the slightest influence on the rating received by that product, and never will have. The technicians who prepare the ratings of products do not even see the labor notes until they're in print.

The simple proof that technical ratings and labor notes do not influence each other is provided, of course, by the fact that "Best Buy" products are sometimes made under poor labor conditions and "Not Acceptable" products under good conditions. And we have never hesitated to point this out. The example illustrated above, taken from two different pages of last month's *Reports*, is a case in point. Anyone who cares to look through back issues can find others.

We may add further that no union has ever so much as intimated to us that we should let working conditions affect a rating.

And we may add still further that any simpleton should know that any deviation from technical objectivity with respect to our ratings would be the quickest possible way for us to commit suicide, which we have no desire to do.

What we say about labor conditions in connection with our ratings goes for anything else anybody can think of. Nothing influences our ratings except the product itself. That is flat and final and there are no ifs, ands or buts involved.

Once more let us repeat the request that we have made on many occasions. It is this: if you ever hear anyone say that any CU rating has been influenced by any special interest, please ask him to write down what he says and sign his name to it; and then please send us the document.

Consumers Union takes full responsibility for the integrity of its work. We think it is fair to ask anyone who impugns that integrity to assume responsibility for doing so, and the consequences thereof.

... So Casey Was Struck Out

One of the great problems facing the American people today is to retain for the American workingman the benefits which should flow from the vast industrial program of the present emergency, and to see to it that the present boom, if it may be called that, is not a boomerang.

Millions of dollars a day are being expended in the national defense program. The unemployment list is dropping, and I think that this body is duty bound to see to it that the money which goes into the pockets of the workingman, whether he be a laborer in industry or a farmer, shall not be snatched from his pockets by inexcusable and artificial rises in price.

WITH these words Representative Joseph E. Casey of Massachusetts asked the House last April to set up a five-man committee to investigate the rising cost of necessities and, if need be, propose remedial legislation to Congress.

Mr. Casey didn't minimize the importance of the work of existing administrative agencies in regulating prices—Leon Henderson's Office of Price Administration and Civilian Supply and Thurman Arnold's Antitrust Division. But, said he:

... regardless of how many agencies in the executive departments are interested in prices, a committee in the legislative branch should make it its duty to act as a watchdog in the interest of decent prices for vital goods—particularly those necessities of life, such as food, and clothing, and medicine.

We agreed with Mr. Casey when he introduced his resolution. Through *Bread & Butter* we urged members to write to their representatives and call upon them to vote for the resolution.

We were all for it, but we didn't get it.

Consumers—who certainly would have benefited from a responsible inquiry into price rises—weren't strongly enough organized to force the passage of the resolution against the strong opposition that developed. The measure was defeated last month by a vote of 200 to 100.

Where did the strong opposition come from? Well, in part it came from that group of legislative hacks ("one eye on the vote and the other eye closed") whose stand on anything in the national interest is so invariedly opposed that their words on one issue are much the same as on any other.

But any decent proposal runs up against opposition from that source. It took more to kill the Casey resolution. Most of all, an apparently pre-determined campaign to misrepresent the whole purpose of the resolution was responsible for its defeat.

Such tactics are ancient and familiar: you set up a straw man and then you point at him with alarm and then you knock him down. And then, if you're a legislator, you tell the homefolks how valiantly you've battled to protect them.

The straw man this time was the charge that the Casey resolution was aimed at the farmer. Mr. Casey was accused of wanting to father a committee which would take money away from the farmer by urging cuts in agricultural prices.

We have read the debate and we wish to note both admiration and sympathy for Mr. Casey's hard fight to make the boys talk to the point. Alas, it was no use. Mr. Casey had expressed an interest in "decent prices for vital goods." And that is a delicate subject in these days of profiteering. So Mr. Casey had to be struck out.

IN THIS ISSUE



The purposes of Consumers Union, as stated in its charter, are "to obtain and provide for consumers information and counsel on consumer goods and services . . . to give information and assistance on all matters relating to the expenditure of earnings and the family income . . . to initiate and to cooperate with individual and group efforts seeking to create and maintain decent living standards for consumers."

TECHNICAL SECTION

Portable Typewriters: Test Results	201
Men's Shorts & Undershirts: Ratings of	
98 Brands	203
Philco's "FM": Let the Buyer Beware	205
Pipe Tobacco: Some Facts & Opinions	206
Cooking Fats & Oils: Their Characteristics	
& Uses	208
Heating Fuels & Firing Methods: With Rat- ings of Oil Burners & Coal Stokers	210
MEDICAL SECTION	
Vitamins in Your Diet	215
A Guide for Cooks	216
NEWS AND INFORMATION	
How the New Tax Bill Works Out	217
The Telephone Rate Reductions	218
Are Frozen Foods a Good Buy? By Ella G. Roller	219
Labor Notes: Men's Underwear,	
Typewriters	221
DEPARTMENTS & FEATURES	
On the Horizon	200
The Docket: Government Actions	223
Cover picture by Free-Lance Photographers Guild	

ARTHUR KALLET Director

Publications Director

BOARD OF DIRECTORS: Herold Aeron, Hartley W. Cross, Jerome Davis, Ned H. Dearborn, Osmond K. Fraenkel, A. J. Isserman (Counsel), Arthur Kallet, Paul J. Kern, Raymond E. Kirk, William M. Malisoff (Special Technical Consultant), George Marshall, Dexter Masters (Secretary), Walter Rautenstrauch, Bernard J. Reis (Treasurer), Adelaide Schulkind, Sidney Wang (Staff Representative), Colston E. Warne (President), Goodwin Watson, Gerald Wendt. VICE-PRESIDENT: James Gilman.

CONSUMERS UNION OF UNITED STATES, INC. is a non-profit organization chartered under the Membership Corporation laws of New York and deriving its income from membership fees. It is sponsored by more than 70 educators, social workers and scientists (names on request). It has no connection of any kind with any commercial interest and accepts no advertising.

MEMBERSHIP FEES: \$3.50 a year with subscription to Reports and Buying Guide; \$4 for Reports and Buying Guide plus Bread & Butter (weekly news report); Foreign and Canadian memberships 50c additional (\$1.25 with Bread & Butter). Reduced rates for groups of 15 or more. Library rates \$3 for Reports alone.

CORRESPONDENCE should be addressed to Consumers Union, 17 Union Square, New York City. CU regrets that time does not permit enswers to inquiries for special information.

AUGUST, 1941

VOL. 6, NO. 8

Consumers Union Reports is published monthly by Consumers Union of United States, Inc., at North Broadway, Albany, N. Y. Entered as second-class matter June 1938 at the postoffice, Albany, N. Y., under the act of March 3, 1879. Copyright 1941 by Consumers Union of United States, Inc.



Consumers Union Reports is Prepared and Edited Under Union Conditions by Contract With the Book and Magazine Guild.

Here's how he was struck out. We quote a few passages from the Congressional Record:

Mr. Cox (Georgia). . . . There are lots of us . . . who have a suspicion that this is something of a drive against the people who stir the soil and make it produce the food that feeds the people. . . .

Mr. Coffee (Nebraska). . . . I am convinced that this is no time to investigate agricultural or livestock commodity prices, for markets are jittery. Everybody is jittery. The markets are so sensitive that an investigation of this nature would be reflected in lower prices to the farmers and livestock producers of the country. . . .

Mr. Casey. . . . The idea that I am advancing a resolution like this to hurt the farmer is ridiculous. . . . There is nothing in this resolution that will hurt the farmer, but on the contrary there is a lot about the work of this committee that will help the farmer. . . . The farmer is the consumer, we are all consumers. . . .

How . . . can the farmer be hurt by a publication of the truth as to the difference between the cost of production and the price paid by the ultimate purchaser . . .?

Mr. Cooley (North Carolina). . . . We have been trying to advance the price of farm commodities and have been appropriating millions of dollars for parity payments, but the very moment it is indicated that the price of farm commodities might advance somewhat, some people are getting excited about it.

Mr. Casey. This is going to help the farmer to get more of the purchasers' dollars into the hands of the farmers.
... I do not see how the gentleman can be greatly concerned about an investigation of the spread between the cost of production and the price that the consumer pays. How can that hurt the farmer? It will surely help him.

... What I want to do is to have this information as to actual costs go before the consumers of this country so that they can know what it is all about and stop all attempts to gouge the people with unconscionably high prices.

... we have no legislative branch of this Government that seems to care ... about the consumer or the price that he pays, and we want to find out the reasons for the spread, and what it is, between the price paid to the producer and the price paid by the consumer.

Mr. Taber (New York). I think we are making things ridiculous by passing such a resolution, putting everybody who is trying to do a legitimate business, in the wholesale or retail trade, on the spot all the time by . . . investigations.

Mr. Knutson (Minnesota). This is clearly an attempt to pound down the prices of food products. . . . I hope all who have the best interests of the farmer at heart will vote against its passage, because it may upset the market if we delve into it at this particular time.

Mr. Murray (Wisconsin). . . . The merits of this legislation are not being properly considered. . . .

And so it went. And so it will go again when, as and if any other proposal to check up on runaway prices comes

along. The honorable gentlemen of the lower House react strongest to the pressure that's hardest, and the people who profit from runaway prices have proved over the years that they know how to apply the pressure.

Consumers had better learn. A flood of letters for the Casey resolution would have changed the vote. Since the flood didn't come, one modest weapon in the fight against the High Cost of Living was lost, and consumers will pay for the lack of it.

On the Horizon

Perfect case study of how large-scale industrial propaganda campaigns affect public opinion will be provided in Utah fight between chain stores and independent grocers culminating in state-wide referendum in November, 1942. New tax law earlier this year levied a chain store tax running up to \$500 per store, plus an added annual levy of \$1,000-\$5,000 on each new unit. Whereupon the Utah Chain Store Ass'n secured the necessary petitions for a popular referendum, and both sides are now joined in pitched battle which will last until November, 1942.

Prospective weapons to be employed include advertising, petitions, radio, and organizational pressure fronts, plus all the

subtler public relations techniques

Mastermind for the chains is believed to be Public Relations Advisor Ted Braun of Safeway Stores, giant West Coast concern which recently invaded the New York market by buying the 500-store Daniel Reeves chain. On the Horizon will report on the struggle from time to time in the future.

Results to date of the new Wool Products Labeling Act, which went into effect July 15, are many and interesting. Men's socks formerly marked "100% virgin wool-faced, lined with cotton," are now labeled 36% wool and 64% cotton; "50% wool-faced" and "25% wool-faced" socks turned out to be 18% and 6% wool, respectively. Makers of men's clothing, skirts, and children's clothes have asked for content guarantees of the woolen goods they buy, which most manufacturers have thus far flatly refused to furnish.

The Clothing Manufacturers Ass'n is planning to contest the constitutionality of the Act before the Supreme Court.

Watch out for an early boom in "forced savings" or "deferred pay" schemes, the modern sugar-coated version of the sales and payroll tax. Involving deductions from payrolls to be repaid after the war, one such plan already operates in Britain, and is probably one of the reasons why British wages are lagging considerably behind prices.

Include in your bedtime prayers President G. W. Hill and four vice-presidents of the American Tobacco Co., recently ordered to repay some \$2,000,000 of the \$11,000,000 bonuses they have received since 1929. Nothing illegal, just a small miscalculation, said the judge, who also suggested that the repayment might "be deducted from future bonuses."

In the face of such peril we salute the 25 officers and directors of General Motors who courageously voted themselves gifts of 45,000 shares of GM stock currently worth \$1,700,000.

On the Horizon wasn't fooling last month when it warned of serious transportation shortages this Fall. Latest straw in the wind is serious lack of passenger equipment in the Southeast, which resulted recently in the unheard-of situation of 15 New York Central R.R. passenger cars pulling out of New York's Pennsylvania Station. Southeastern railroads have been requested to discontinue passenger excursions, which are also being reduced quietly throughout the rest of the country.

One of the early results of the policy which the textile trade calls "grab while the grabbing is good" is expected to be virtual elimination of the dollar shirt. Many manufacturers are dropping the line entirely, and those who plan to retain it bluntly warn that they will use "the poorest construction and materials possible."

TECHNICAL SECTION

OF CONSUMERS UNION REPORTS

Ratings of products represent the best judgment of staff technicians or of consultants—more than 200 specialists selected for competence and freedom from commercial bias—in university, governmental and private leboratories. Samples for test are in practically all cases obtained on the open market by CU's shoppers. Ratings are based on laboratory tests, carefully controlled use tests, the opinion of qualified authorities, the experience of a large number of persons, or on a combination of these factors. Most ratings of necessity reflect opinion as well as scientific data. For even with rigorous tests, interpretation of findings is often a matter on which expert opinion differs. It is Consumers Union's pledge that such opinions as enter into its evaluations shall be as competent, honest, and free from bias as it is possible to make them.

"Best Buys" should give greater return per dollar although some products rated "Also Acceptable" may be of higher quality. Except where atherwise noted, a product rated "Not Acceptable" is judged to be of inferior quality or is considered to be potentially harmful.



Portable Typewriters

CU's tests show that one buying rule is basic: insist on a home trial before you buy any portable typewriter. This report tells the points to check and gives ratings of 18 models

When you take a new car off the show-room floor it immediately becomes a used car, and its value drops automatically a sixth or so. Most everyone knows this. But a lot don't know that you risk a much greater depreciation when you buy a portable typewriter. A new portable may lose anywhere from one-half to two-thirds of its original value before half the ribbon is dimmed.

As a case in point, CU, during its tests on portables, bought a Corona Sterling for \$59.50. Three weeks later, when CU tried to trade this machine in on a more expensive Corona Silent, the dealer would allow only \$22.50.

Obviously, therefore, when you're buying a portable typewriter, you'd better make very sure that you're getting what you want before you close the deal.

The best way to prevent future disappointment is to give any typewriter you're considering a home trial; most dealers will permit this. You can find out, through use under normal conditions, whether the machine is well constructed, has the convenience features you want, and is generally adaptable to your individual typing peculiarities.

CU's tests showed an amazing lack of uniformity among different samples of the same model, so it's important to test the actual machine you intend to buy.

If you want to get maximum quality at a minimum price, be thorough about

your shopping. Visit more than one dealer. Find one who will give you a high price for your old typewriter. Mention this price to other dealers, and the chances are (100% in CU's experience) that they will match the price. You can then make your final choice on merit.

When you've finally decided on a machine, have the dealer make all the necessary adjustments. Then get a guarantee that he will repair any defects that develop within a year (or six months for cheaper models).

WHAT TO LOOK FOR

Some features in a portable—good touch, no type defects, easy mechanical operation—are absolutely necessary for good typing. Others—tabulator, two-color ribbon, double cylinder knobs and other such "convenience" features—vary in importance with the individual. In the final analysis, you should choose a type-writer which rates best with special reference to the features you yourself want.

TOUCH This is largely a matter of personal taste. The only way to tell whether you like the "feel" of the keyboard is to try it. Only in a few portables is the touch so heavy that it produces fatigue.

Some of the more expensive portables are equipped with a "touch control." This can do little toward improving the "feel" of the machine if it doesn't suit you in the first place.

The touch of a portable is most important if you expect to make frequent shifts from one kind of a typewriter to another. If you use a standard machine in an office and a portable at home, you may never become reconciled to the difference in action of the smaller machine. Try to select a portable which is similar to your standard in touch, placement of keys, and mode of operation.

NOISE Unless you rate silent operation highly, it's seldom worthwhile to spend the extra money for a noiseless portable. In most modern machines the worst noises are eliminated; remaining sounds can often be muffled by placing the typewriter on a rubber mat. True "noiseless" models—the Remington De Luxe Noiseless and the Underwood Noiseless—substitute a pressure method of typing for the sharp impact of the type bar. This reduces noise but also decreases the ability of the typewriter to make clear copies.

When impact noises are reduced, other mechanical sounds are emphasized. And these may become more annoying than the conventional typing sounds. Since the mechanical noise usually increases with the age of the typewriter, even the best of the "noiseless" machines eventually cease to live up to their names.

TYPE DEFECTS Don't buy a typewriter that produces smudgy, blurred characters, uneven lines of type, or "images."

In new machines smudgy typing is usually not caused by defects in the type faces, but by an over-inked or inferior grade of ribbon. (See the report on ribbons, April 1941.) You can tell what's



CORONA STERLING'S FLOATING

. . . was the most satisfactory shift found in CU's tests. The type assembly moves while the carriage remains stationary. Rated an all-round good machine causing the difficulty by removing the ribbon and typing on carbon paper and a "second" sheet (no first sheet). If the letters are blurred, the type face probably has defects.

If capitals don't fall in line with small letters, or if some capitals or small letters print above or below the line, the machine has faulty alignment. The first fault is fairly easily eliminated; the second may be more difficult to remedy.

Check for "images"-faint type above the printed line, or duplication of certain letters one space to the right of the original. The faint characters above can often be eliminated by turning the ribbon upside down when the upper portion is worn out, instead of merely switching to the lower half. It's harder to get rid of images to the right of letters. Turning the touch control (if the machine has one) to "heavy" often helps. But in a properly designed and adjusted typewriter there shouldn't be any such images even with the control set at "light."

MECHANICAL OPERATION To avoid future headaches and possible regrets, make a careful checkup of the mechanical operation of a portable typewriter before you buy it. Below is a good routine.

1. Make sure that the keys don't have an excessive sway to either side. The backspacer and lower row of keys usually waver on portable typewriters.

2. Make sure that the type bars don't stick or jam against the platen. Press each key slowly until the type bar touches the platen, and then release the key slowly. There should be no tendency for any type bar to stick.

3. Make sure that the back-spacer moves the carriage back just one space, no matter how it's struck.

4. Check the escapement (movement of the carriage when keys are struck). Raise a type bar and press it firmly against the platen. The carriage should move just before the type bar enters the type guide -that is, shortly before it hits the platen. If the carriage won't move until the bar touches the platen, or if it's necessary to pound the keys to make the carriage move, the escapement is faulty and apt to cause trouble.

5. Check both the right and left margin locks at various widths. To test the left margin lock, push the carriage against the lock slowly, then in a normal manner, and finally with force. In each case the margin should be the same. In testing the right margin lock, make sure that the keys lock, so that there's no piling up of letters, and that the margin release doesn't let the carriage skip one space.

6. Test the machine for easy shifting. Make sure that there's no "bounce" (lowering of a small letter following a capital) when the shift lever is released





MOST CONVENIENCE FEATURES

, are found on the Corona Zephyr De Luxe. CU consultants found this model to be a "Best Buy"

. . . are lacking on the Underwood De Luxe Leader and other portable typewriters in the lowest price class

during the fastest typing. The shift lock should work easily regardless of the angle from which it is depressed, and the release should be practically instantaneous in response to a light touch.

CARDS. ENVELOPES, MANIFOLDING

A good portable should have a deep enough paper release to admit a stiff postcard, a large business envelope, or several sheets of paper, without tearing or disarranging them.

You should be able to fill a card with single lines of type without producing images or smudges,

Some machines don't have long enough platens to hold a standard 91/2" business envelope. Make sure that your typewriter doesn't soil, wrinkle or tear the ends.

If you intend to do much manifolding on your typewriter, test it to see how many copies it will reproduce clearly. The poorest portables should provide two legible carbon copies; the best will make four carbon copies.

HOW CU TESTED

U tested typewriters for action, me-A chanical construction, noise, appearance of work produced, efficiency in card typing and manifolding, convenience features (ease of erasure, visibility, margin locks, tabulator stops, &c.), and miscellaneous features.

As a result of its tests, CU found that 77% of the typewriters tested were defective in some respect. This, in spite of the fact that they were obtained in the open market as new typewriters supposedly in perfect condition. In some cases of defective models, three and four samples were tested to determine to what extent the defects were characteristic of the whole line.

Best Buys

The following typewriters of the "Acceptable" list are judged to offer the most value for the money in the order given. For full details, see listing under "Acceptable."

Corona Zephyr De Luxe. \$39.75, list; widely available at \$34.75 and a "Best Buy" at either price.

Corona Sterling, \$59.50.

The following machines are "Best Buys" only because of low price and only if convenience features are not important to you:

Corona Zephyr. \$29.75.

Remington Remette. \$29.75.

Underwood De Luxe Leader. \$39.50, list; available at \$29.75 and a "Best Buy" only at that price.

Acceptable

(In order of quality without regard to price)

Corona Silent (L. C. Smith & Corona Typewriters, Inc., Syracuse, N. Y.). \$64.50. Impact method of typing. Was about as noisy as the Sterling below, and not worth \$5 difference in price.

Corona Sterling (L. C. Smith & Corona . Typewriters, Inc.). \$59.50. An excellent all-round machine. Relatively silent, yet \$5-\$10 cheaper than "noiseless" models.

Royal Quiet De Luxe (Royal Typewriter Co., Inc., NYC). \$64.50. Impact method of typing. Was not so quiet as Corona Silent and Sterling.

Underwood Noiseless (Underwood, Elliott, Fisher Co., NYC). \$69.50. True noiseless type, and more quiet than Corona Silent, Touch good for a noiseless. Price high.

Remington De Luxe Noiseless (Remington Rand, Inc., Buffalo, N. Y.). \$74.50; available from Sears-Roebuck at \$69.50. True noiseless design; least noisy of all machines tested. Standard business envelope difficult to insert. Machine very much overpriced.

Royal Aristocrat (Royal Typewriter Co., Inc.). \$59.50. Mechanical failures on all three samples tested. Probably a satisfactory machine if you can get a good

one and like the touch.

Remington Model 1 (Remington Rand, Inc.). \$64.50. Noisiest typewriter tested. Good touch. Bad images. Standard business envelope somewhat difficult to insert. Considerably overpriced; built to sell as a \$59.50 typewriter, and listed at this price as late as last April.

Royal Arrow (Royal Typewriter Co., Inc.). \$54.50. Comparatively noisy. Mechanical failures on models tested. No tabulator; hard-action on back-spacer and shift lock. Be sure to check the left margin lock and release. Standard envelope tight fit.

Underwood Champion (Underwood, Elliott, Fisher Co.). \$59.50. Noisy. Mechanical failures on all four models tested. Best touch of all machines tested. Erasure difficult. Produced poor manifolding. Check particularly for back-spacing, type alignment, sticking keys, jamming, and left margin release. Damaged a standard business envelope,

Underwood Universal (Underwood, Elliott, Fisher Co.). \$54.50. Excellent touch. Erasure difficult. No tabulator. Cards and standard envelope difficult to insert.

Corona Standard (L. C. Smith & Corona Typewriters, Inc.). \$54.50, list; available at some dealers at \$49.50. Erasure difficult. No tabulator. Back-spacer at right.

Remington Model 5 (Remington Rand, Inc.). \$54.50. Noisy. "Self-starter" which moves the carriage five spaces at a time substituted for tabulator. Visibility only fair. Machine bounced a bit under strenuous typing. Difficult to insert standard business envelope.

Corona Zephyr De Luxe (L. C. Smith & Corona Typewriters, Inc.). \$39.75, list; available at most dealers and from Sears-Roebuck at \$34.75. The cheaper Zephyr dressed up and with more convenience features such as a larger carriage which permitted the insertion of a standard business envelope (a tight fit, however), automatic ribbon reverse, type lock, margin release, paper fingers and single or double line spacing. Excellent touch. Very compact and lightweight.

Corona Zephyr (L. C. Smith & Corona Typewriters, Inc.). \$29.75. Stripped of most convenience features and would not take standard business envelope. Good touch and appearance of work excellent. Very lightweight. Except for the lack of conveniences, generally satisfactory.

Royal Companion (Royal Typewriter Co., Inc.). \$49.50. A generally unsatisfactory lightweight machine. Action poor. No tabulator. Margin release on left side; back-spacer on right.

Royal Varsity (Royal Typewriter Co., Inc.). \$44.50. Same as Companion, but without touch control or provision for two-color ribbon.

Remington Remette (Remington Rand, Inc.). \$29.75. Most convenience features eliminated. Very good touch. Appearance of work only fair. Damaged standard business envelope. Despite other disadvantages, such as single carriage knob, manual ribbon reverse, single-color ribbon, no bell or type-lock, back-spacer on the right side, and only fair v sibility, the Remette's low price makes it a "Best Buy."

Underwood De Luxe Leader (Underwood, Elliott, Fisher Co.). \$39.50, list. Can be obtained from some dealers and Montgomery Ward for \$29.75. A "Best Buy" at the lower price but not at the higher. Lacked most convenience features; had manual ribbon reverse, no margin release, bell or key lock, shift release on right.

Men's Shorts & Undershirts

Good fit and durability are the most important things to look for. Here are CU's ratings of 41 brands of woven shorts, 19 brands of knitted shorts, 38 brands of undershirts

WOVEN SHORTS

Since men's shorts are strictly hidden items of wear, appearance doesn't matter nearly so much as good fit and durability. Consequently, sales talk plays up supposedly unique construction features, glorifying "banjo seats," "racket," "balloon," or "parachute" styles, &c.

Despite the fancy names, most shorts are made pretty much along the same lines: with a seat resembling a table tennis paddle which eliminates seams down the center of the back and crotch.

That absence of seams is one important factor in a good pair of shorts. In addition, the shorts should be cut full, should not have rough seams anywhere, and should measure up to standard specifications for size before and after washing. The fabric should be durable enough to withstand many washings, and any color should be fast.

Some time ago the Underwear Institute and the National Bureau of Standards set up standard size specifications for the men's woven shorts industry. But then some of the manufacturers refused to conform to the standards, with the result that other producers soon found themselves on the short end of the competition, and the standards were discarded.

The only check on sizes at present is the manufacturer's conscience and what customers will put up with. However, CU technicians found that out of 41 pairs of woven shorts tested, only four failed to meet the Institute's specifications.

Cotton prints, solid and woven pattern broadcloth, and madras are most commonly used as fabrics for men's shorts, and sateens and oxfords less frequently. Together with some solid color broadcloth, cotton prints are used almost exclusively in the lower-priced shorts.

Since broadcloth and madras wear better than most printed cottons, usually it's wise to buy shorts made of these fabrics. Some manufacturers, however, are putting out shorts in durable printed cottons. Two of these—Woolworth's Le Savoy and W. T. Grant's Wearite—are listed among the "Best Buys."

Colorfastness isn't a crucial problem in men's shorts; usually the colors, which are vat-dyed, don't fade or stain in washing. A few shorts, however, and especially fancy-patterned, bright-colored styles, may run and stain clothes being washed with them.

Waistband construction is pretty much a matter of personal choice. Almost all brands can be bought in two or three types—elastic in the back or on the sides, concealed inside the waist seam or outside; French backs with adjustable button tabs; tie sides with drawstrings.

Most of the shorts tested used snap fasteners—the much publicized "grippers"—as front fastenings. These, CU technicians found, are extremely satisfactory.

As in buying other garments, it's important to look for good workmanship in shorts—neat, evenly spaced stitching, well-made buttonholes with bartacking to prevent raveling, and reinforcements at points of wear. The fly should be bartacked or both sides of the inner seam of the fly should be made of one piece to prevent tearing.

Woven shorts were tested by CU technicians for thread count, weight of the cloth, tensile strength, and resistance to abrasion. Construction was examined for defects affecting wear and comfort. Fit and shrinkage were determined by measurements of waist, length, front and back rise, width of inseam, width of leg opening and width of seat before and after washing. One to two samples of each brand were tested.

KNITTED SHORTS

When knitted shorts were introduced several years ago, they were all one style: form fitting garments cut sharply from hip to crotch—the so-called "briefs" or "Scandals." Now they come also in thigh and knee lengths.

Knitted shorts are usually made of cotton in flat knit, lxl rib or 2x2 rib. Sometimes varied ribbing or a combination of two or more types of knit are used. Though the flat knit and the 1x1 rib fabrics seem to resist abrasion better, the 2x2 knit has greater elasticity.

There are several points to look for when you're buying knitted shorts. Make sure that they're long enough to fit comfortably over the hips and wide enough at the waist and leg openings to prevent binding. Seams should be stitched so that they won't tear when the shorts are stretched fully at any sewn point. Knitted shorts generally don't come in graded sizes, but are marked "small," "medium," or "large;" make sure you know which size you take.

Each pair of knitted shorts was tested for bursting strength and resistance to abrasion. CU technicians found that all the shorts were sized satisfactorily and showed satisfactory resistance to shrinkage.

KNITTED UNDERSHIRTS

You can pay from 10¢ to \$1 for a knitted undershirt, but you won't get much greater wearability or comfort from the \$1 model than from 25¢ or 35¢ styles.

Thus CU technicians found that the highest quality undershirt tested sold for 35¢ (Savon) while the second and third highest quality shirts sold for 27¢ (Fruit of the Loom) and 25¢ (Kresge).

Only white, flat or ribbed knit cotton shirts were tested by CU since this is the style most commonly sold. Most of them were similar in construction. In all the shirts the arm hole and collarette seams were well sewn so that they could be expected to last the life of the garment.

In some shirts the bottom seam ripped open when the shirt was stretched. While such construction is hardly to be recommended, there's little probability that shirts in actual use would be stretched to as great an extent as they were in the tests.

All the shirts tested were ample for the size marked, and didn't shrink excessively.

Knitted undershirts come in various kinds of knits and ribs. In general, flat knits and lxl ribs have greater resistance to abrasion than 2x2 ribs; the higher ribs, 6x5 and 6x6, have the least resistance. The higher ribs, however, have more elasticity and, since they cling to the body more closely, may give greater comfort.

WOVEN SHORTS

Best Buys

The following shorts of the "Acceptable" list are judged to offer the most value for the money in the order given. For full details see listing under "Acceptable."

Wearite. 25¢.

Le Savoy. 25¢.

Leeds. 29¢.

Sears' Cat. No.—5145. 33¢ plus postage. BVD. 35¢.

Ward's Cat. No.—421. 35¢ plus postage. Sears' Cat. No.—5167. 29¢ plus postage. Fruit of the Loom. 27¢. Conway. 35¢.

Acceptable

(In order of quality without regard to price)

EXCELLENT

Arrow (Cluett, Peabody & Co., NYC). 65¢ to 75¢. Broadcloth shorts. The Arrow 65¢ madras shorts rated considerably lower. Reis-Clix (Robert Reis & Co., NYC). 55¢. Broadcloth shorts.

GOOD

Mansco (Manhattan Shirt Co., NYC). \$1. Madras or broadcloth,

Sears' Cat. No.—5109 (Sears-Roebuck). 49¢ plus postage. Madras.

A.M.C. 54 4FB164 (Associated Merchandising Corp. Stores¹). 59¢. Broadcloth.

FAIR

Arrow (Cluett, Peabody & Co.). \$1.

Sears' Cat. No.—5145 (Sears-Roebuck). 33¢ plus postage. Broadcloth.

BVD (BVD Co., NYC). 35¢. Broadcloth. Ward's Cat. No.—421 (Montgomery Ward). 35¢ plus postage. Broadcloth.

Kempton (R. H. Macy & Co., NYC). 39¢. Broadcloth.

A.M.C. 55X117 (Associated Merchandising Corp. Stores). \$1. Broadcloth. Of better appearance than 59¢ A.M.C. shorts listed above but wore out faster.

Wilson (Wilson Bros., NYC). 50¢. Print, 50¢ Wilson madras shorts were

of lower quality.

Marshall Field (Marshall Field & Co., Chicago). 50¢. Broadcloth or madras. The 35¢ Conway shorts listed below were only slightly inferior.

Conway (Marshall Field & Co.). 35¢.
Broadcloth.

Wearite (W. T. Grant Co. Stores). 25¢. Print.

Seamont (W. T. Grant Co. Stores). 39¢.

Print cloth of the same quality as 25¢

Wearite above. Higher price appeared to
be due to French back.

Wilson (Wilson Bros.). 50¢. Madras.

Quality appeared to vary in different samples from fair to good.

Marshall Field (Marshall Field & Co.). \$1.50. Quality lower than that of 50¢ Marshall Field shorts listed above; varicolored fancy stripe pattern.

Kempton (R. H. Macy & Co.). 69¢, Broadcloth. Quality was lower than that of 39¢ Kempton shorts listed above. Le Savoy (F. W. Woolworth Stores). 25¢,

Le Savoy (F. W. Woolworth Stores). 25¢ Print.

Varsity (Excelsior-Varsity Underwear Co., Baltimore). \$1. Madras. Craftsman (J. C. Penney Co. Stores). 49¢.

Craftsman (J. C. Penney Co. Stores). 49¢
Madras.

Munsingwear (Munsingwear Co., Minneapolis). 55¢. Broadcloth. 55¢ Munsingwear madras shorts were of lower quality.

Mansco (Manhattan Shirt Co.). 50¢. Broadcloth or madras.

Leeds (Schulte Cigar Stores, NYC). 29¢.
Broadcloth.

Varsity (Excelsior-Varsity Underwear Co.). 50¢. Broadcloth.

¹ For a nation-wide list of A.M.C. stores, see page 11 of the 1941 Buying Guide.

Sears' Cat. No.-5167 (Sears-Roebuck). 29¢ plus postage. Broadcloth, Sale ending August 31 at 25¢; 4 for 97¢ plus

Penney (J. C. Penney Co. Stores). 35¢.
Broadelath.

CD (Cooperative Distributors, Inc., NYC).
Cat. No. 2217. 33¢, plus postage if ordered by mail. Broadcloth.

Arrow (Cluett, Peabody & Co.), 65¢.
Madras.

Ward's Cat. No.—492 (Montgomery Ward), 65¢ plus postage. Broadcloth with a woven stripe.

Fruit of the Loom (Fruit of the Loom, Inc., NYC). 27¢ to 29¢. Quality of broadcloth shorts in this brand and price was somewhat higher than that of print.

POOR

Aintree (The May Co., Los Angeles). 59¢. Broadcloth.

Manhattan (Robert Reis & Co.). 35¢.
Broadcloth.

Ward's Cat. No.-544 (Montgomery Ward), 29¢ plus postage.

Munsingwear (Munsingwear Co.). 55¢.

Reis (Robert Reis & Co.), 50¢, Madras,

Not Acceptable

These shorts were either skimped in size or shrank excessively or both.

Short Eez (Superior Underwear Co.). 55¢.

Low quality broadcloth with skimped measurements in waist, inseam, seat and leg openings.

Otis (Otis Underwear). 35¢. Good quality print but measurements were skimped in length, inseam, front and back rise, and leg openings. The waist measurement was slightly small before washing and excessively small after washing.

Kempton (R. H. Macy & Co.). 28¢. Good quality print but skimped in length and leg openings. Seat and back rise were slightly small before washing and excessively small after washing.

Kresge's Style No. 50 (S. S. Kresge Co. Stores). 25¢. Fair quality print. Measurements were skimped at every point.

KNITTED SHORTS

Best Buys

The following knitted shorts of the "Acceptable" list are judged to offer the most value for the money in the order given, For full details see listings below.

Fruit of the Loom. 27¢.

Sears' Cat. No.—5107. 23¢ plus postage.

Ward's Cat. No.—538. 29¢ plus postage.

Craftsman. 49¢.

Leeds. 29¢.

Acceptable

EXCELLENT

Craftsman (J. C. Penney Co.). 49¢. 1x1 rib.

GOOD

Fruit of the Loom (Fruit of the Loom, Inc., NYC). 27¢. 1x1 rib.

Ward's Cat. No.—484 (Montgomery Ward). 47¢ plus postage. lxl rib

Scandals (Robert Reis & Co., NYC). 50¢.

1x1 rib. Label read "Made larger to allow for adjustments after washing" but measurements were no larger than those of comparable sized shorts.

FAIR

Kempton (R. H. Macy & Co., NYC). 49¢.

E-Cut (E-Cut Knitting Mills, NYC). 35¢. 1x1 rib.

Ward's Cat. No.—538 (Montgomery Ward). 29¢; 4 for \$1.10 plus postage. Sale ending August 31, at 27¢; 4 for \$1 plus postage. 1x1 rib.

Kresway (S. S. Kresge Stores). 25¢. 1x1 rib.
Cutaway (Wilson Bros., NYC). 50¢. 2x2 rib.
Jockey (Cooper's, Inc., Kenosha, Wis.).
50¢. 1x1 rib.

Leeds (Schulte Cigar Stores, NYC). 29¢; 4 for \$1.10. 2x2 rib.

Otis (Otis Underwear, NYC). 35¢. 1x1 rib. Sears? Cat. No.—5107 (Sears-Roebuck). 23¢ plus postage. 1x1 rib with 2x2 rib decorative stripe.

Woolworth (F. W. Woolworth Stores). 25¢. 2x2 rib.

Club Fellow (Marshall Field & Co., Chicago). \$1. Knee length shorts. 2x2 rib.

Munsingwear (Munsingwear Co., Minneapolis, Minn.). 50¢. Decorative stripes of alternating 1x1 and 2x2 rib.

POOR

Sears' Cat. No.-5149 (Sears-Roebuck).
49¢ plus postage. 1x1 rib.

Short Eez (Superior Underwear Co., Piqua, Ohio). 50¢. Novelty knit.

Wearite (W. T. Grant Stores). 25¢, 2x2 rib.

UNDERSHIRTS

Best Buys

The following shirts of the "Acceptable" list are judged to offer the most value for the money, in the order given. For full details see listing under "Acceptable."

Kresge. 10¢.
Fruit of the Loom. 27¢.
Kresge Athletic Shirt. 25¢.
Wearite. 25¢.
Le Savoy. 25¢.

Acceptable

(In order of quality without regard to price)

EXCELLENT

Sa-Von (The May Co., Los Angeles). 35¢, 2x2 rib.

Fruit of the Loom (Fruit of the Loom, Inc., NYC). 27¢. 6x5 rib.

Varsity (Excelsior-Varsity Underwear Co., Baltimore). 50¢. 2x2 rib.

Kresge Athletic Shirt (S. S. Kresge Stores). 25¢. 2x2 rib.

GOOD

Munsingwear (Munsingwear, Inc., Minneapolis, Minn.). \$1. Flat knit.

Comfort (J. C. Penney Stores), 35¢. 2x2 rib.

Conseay (Marshall Field & Co., Chicago). 35¢. 2x2 rib.

Wearite (W. T. Grant Stores). 25¢. 1x1 rib.

BVD (BVD Co., NYC). 35¢. 6x5 rib.

Carter's (Wm. Carter Co., Needham Heights, Mass.). \$1. 1x1 rib.

FAIR

Jockey (Cooper's, Inc., Kenosha, Wis.). 50¢. 2x2 rib.

Manhattan (Robert Reis & Co., NYC). 35¢. 2x2 rib.

Vality (Rubin-Meltzer Corp., NYC). Sold by Cooperative Distributors, NYC, at 32¢, plus postage if ordered by mail. 2x2 rib.

Le Savoy (F. W. Woolworth Stores). 25¢. 4x2 rib.

Ward's Cat. No.—474 (Montgomery Ward). 29¢ plus postage. 2x2 rib.

Otis (Otis Underwear, NYC). 35¢. Flat knit.

Shirt Eez (Superior Underwear Co., Piqua, Ohio). \$1. 2x2 rib.

Marshall Field (Marshall Field & Co., Chicago). 50¢. Flat knit.

Arrow (Cluett, Peabody & Co., Inc.). 50¢. Flat knit.

A.M.C. (Associated Merchandising Corp.). \$1, 2x2 rib.

Macy's (R. H. Macy & Co., NYC). 94¢. Flat knit.

Leeds (Schulte Cigar Stores, NYC). 29¢. Novelty knit. 2x1, 2x2 rib. 4 for \$1.12 plus postage.

Sears' Cat. No.-5162 (Sears-Roebuck). 29¢. 2x2 rib.

Hanes (The May Co.). 35¢. 1x1 rib.

Mansco (Manhattan Shirt Co., NYC). \$1. 6x6 rib.

Jim Shirt (Robert Reis & Co.). 50¢. 6x6 rib. Otis (Otis Underwear, NYC). 35¢. 6x6 rib. Wilson Bros. (Wilson Bros., NYC). 50¢. 2x2 rib.

POOR

Arrow (Cluett, Peabody & Co.). 50¢. 6x6 rib.

Munsingwear (Munsingwear, Inc.). 50¢. 4x4 rib.

Manseo (Manhattan Shirt Co., NYC). \$1. Flat knit.

Varsity (Excelsior-Varsity Underwear Co.). 50¢. Flat knit.

Kresge's (S. S. Kresge Stores). 10¢. 2x2 rib.

Sears' Cat. No.-5160H (Sears-Roebuck), 29¢ plus postage. Flat knit.

Ward's Cat. No.—425 (Montgomery Ward). 22¢ plus postage. Flat knit.

Vality (Rubin-Meltzer Corp., NYC). Sold by Cooperative Distributors, NYC, at 22¢, plus postage if ordered by mail. 3x5 rib.

A.M.C. (Associated Merchandising Corp.). \$1. Flat knit.

Macy's (R. H. Macy & Co.). 33¢. 6x6

Philco's "FM" Let the Buyer Beware

CONSUMERS Union's attention has been called to the fact that some radio manufacturers, and notably PHILCO, are releasing "FM radios" which are imitations of the real thing.

To begin with, the two outstanding features of FM from a user's viewpoint are absence of static and better tone. PHILCO's FM radio is so constructed that it is not staticless under normal conditions of use. It will, however, bring in FM stations, and the static heard on it will be small in comparison with that heard on the regular broadcast band.

CU has compared a PHILCO FM set with a standard (Armstrong system) FM radio, and has found that if the static is bad enough the PHILCO lets it through while the standard FM set does not.

In addition, the type of radio built by

to separate two interfering stations operating on the same spot (frequency)—and there will be such stations as the popularity of FM grows—while a radio built on the basic Armstrong principle will bring in only one of two interfering stations.

On the basis of its examination and

PHILCO cannot be expected in normal use

On the basis of its examination and test of the PHILCO set, CU warns consumers not to buy the PHILCO if they want the best FM reception. Despite its limitations, however, PHILCO FM does give better reception than conventional broadcast band sets, and therefore might be a good buy as a sort of in-between model if its price were considerably lower. But it sells in the same price range as full-fledged FM sets.

Ratings of FM radios are scheduled to appear in the November REPORTS.

Pipe Tobacco

What are the best brands? Neither tobacco experts nor ordinary smokers agree. CU presents some opinions on the subject, together with information on types of tobacco and suggestions for mixing your own blends

PIPE SMOKERS, when it comes to the relative merits of tobacco brands, hold just about the strongest and most divergent opinions of any consuming group in the country. And that goes for the several experts consulted by CU in the preparation of this report. Because objective tests, on a product so hemmed in by personal reactions, have little meaning, CU hoped to find enough agreement among the tastes of experts to provide a basis for rating brands. What CU found instead was that no two experts came within miles of agreeing.

So all we can say is that the choice is up to you, Whatever brand or blend suits you best is your "Best Buy." The listings below give the opinions of the experts consulted by CU, but if they don't agree with your own findings, you have our willing permission to ignore them.

On the other hand, the listings may provide a clue to good buys if you are not satisfied with the tobaccos you have been using, or if you want to experiment with other brands,

For the general information that makes up the bulk of what follows, CU makes no apologies. Some of it will be old stuff to the more advanced pipe addicts, but most of it should be helpful to the average pipe smoker interested in getting the most for his money.

BASES & FLAVORINGS & CUT

THE UNITED STATES is the home of tobacco; there are only 10 states which don't grow some type of leaf, and American growers produced over a billion and a half pounds during 1940. Of the types produced for pipe tobacco, Burley, Virginia and "bright" leaf are used as bases for most American brands.

Burley is most popular, because it is neutral in flavor and absorbs flavoring ingredients remarkably well. Sweeter-flavored and more aromatic Virginia doesn't absorb as well as Burley.

When a stronger flavor is wanted, "bright" tobaccos, such as North Carolina, are used for bases. Their distinctive taste comes not so much from natural properties of the leaf as from the manner in which it is cured. Burley and Virginia are "air-cured," but bright tobaccos are cured by artificial heat from flues ("flue-cured").

Although there are a few American flavoring tobaccos (notably the famous Perique of the lower Mississippi Valley), manufacturers for the most part get such tobaccos from Europe and Asia—principally Ireland and Scotland, or the Eastern Mediterranean. Latakia, a Syrian leaf widely publicized as the "something new added to" Old Golds, has long been a popular flavoring tobacco for pipe smokers. Its distinctive aroma and taste result from the manner in which the leaves are cured—over open fires of camel dung.

Although the War has stopped the shipment of Oriental tobaccos to this country, trade journals declare that reserves on hand will probably last one, two, or even three years. Nevertheless, we may be due for a shortage of Latakia, since more than half of the supply in the country at the present time is held by one company—Philip Morris, makers of Revelation pipe tobacco.

FLAYORINGS Almost all American brands contain, in addition to basic leaf and aromatic tobaccos, some flavoring agents. You can take your pick among these—sugar, licorice, rum, rum and maple, chocolate, honey, caramel, or an assortment of brandies and liqueurs. Or you may prefer a complete absence of flavoring, as Englishmen have come to do, because of British prohibitions against the flavoring of tobacco. Or you can buy unflavored tobacco and flavor it yourself in a humidor with orange peel, sliced apples or a liquor-impregnated humidifier.

CUT As old pipe fans know, cut is what determines the speed and temperature of burning. Pipe tobaccos are sold in all degrees of cut. A fine cut tends to burn quick and hot, while a rough cut is slow-burning and cool. But along with the coolness you must expect a hard-drawing pipe which goes out frequently. If you choose plug-cut, the coarsest of all, you may find that coals which form in the bowl of your pipe cause uneven burning, and make frequent relighting necessary.

CONSUMPTION BOOM

A merican tobacco manufacturers are anticipating a sizable boom in tobacco consumption as a result of increased purchasing power growing out of the Armaments Program. Moreover, statistics reveal that the boom is partly under way. In April of this year cigarette consumption was 11% higher than in April 1940; pipe and chewing tobacco jumped 2%.

War-time experience in England seems to justify tobacco manufacturers' hopes. In the last year and a half, consumption in that country has risen 10%, probably as an effect of the increased purchasing power of workers and the strain of war.



IF YOU YEARN TO MIX YOUR OWN

. . try this mixture as a starting point, and then vary it to suit your tastes

But the British government is now laying restrictions on existing stock and is curtailing further imports. In view of these actions, tobacco prices are rising, actually and through size substitution. Many English cigarette manufacturers have reduced the size of popular brands, or introduced new brands is small sizes, while maintaining the former price.

There is some indication that American smokers may also be due for some substitutions in material other than tobacco. Already trade journals are mentioning possible shortages of flavoring ingredients. Manufacturers are considering substitutes for paper and metal used in packaging pipe tobaccos. There may even be some alteration of pipe material. One tobacco journal reports that American laurel and rhododendron root may replace briar, owing to the cutting of imports.

Whether the World War will bring any changes in smoking habits remains to be seen. As yet America still favors cigarettes, with other forms of tobacco, such as cigars, smoking and chewing tobacco and snuff, playing second fiddle. In England, changes have occurred in the form of a revival in the popularity of snuff.

The new popularity of snuff is attributed in part to the scarcity of cigarettes and in part to the current prohibitions against smoking in airplane and munitions factories or during blackouts. Snuff is put out in perfumed and plain varieties, the perfumed brands appealing mostly to women.

The use of snuff is far from unknown at the present time in this country. Over 37 million pounds of snuff tobacco are raised annually in the United States. Great quantities of it are used by Southern laborers and Scandinavians in Minnesota and Wisconsin.

Although American tobacco manufacturers don't have to fear rationing—there's an abundant domestic supply—they've been looking warily at tax proposals before Congress. The Treasury Dep't recommended, in addition to increases in the Federal cigarette tax, doubling rates on cigars and smoking and chewing tobacco. But the tobacco interests fought hard, and the bill recently sent to the House by the Ways and Means Committee allowed excise levies on tobacco to remain at their 1940 levels.

PIPE POINTERS

The Higher rates go into effect, you will need more than ever to buy tobacco carefully to avoid wasting your money. Remember that it is cheaper to buy it by the pound than in pocket tins. If you buy it in quantities, however, you must keep it in a humidor with a piece of apple or apple peel, or a damp blotter to preserve the moisture.

If you carry tobacco around in your pocket, get an oilskin pouch. Oilskin is more satisfactory than cloth or leather, because it won't let the tobacco get dry.

But remember that the best quality and best-cared-for tobacco won't give pleasant smoking if it's used in a dirty pipe. Keeping a pipe really clean may be a bother, but it's worth it. Use a pipe cleaner frequently and occasionally soak one in alcohol and leave it in your pipe overnight. If you want to be positively meticulous about your smoking habits, knock out the heel of the pipe and disengage the bit after every smoke.

Here are a couple of don'ts to observe for pleasant smoking: (1) Don't smoke a pipe in a strong wind; the excess heat created may crack the bowl or burn out the pipe. (2) Don't smoke too rapidly, pack the tobacco too tightly, or refill a hot pipe; a cracked pipe from overheating may be the result.

Chemical tests have shown that pipe smoke contains less than half as much nicotine as cigarette smoke does (cigar smoke contains least of all—about one-fourth as much as cigarette smoke). But pipe smokers get the hottest mouth temperatures. 135° is considered the maximum temperature comfortable for the mouth and tongue. Cigarette smoke doesn't rise above body temperature (98.6°) until the last fourth of the cigarette is consumed. Then temperatures may go up to 112°.

Pipe smoke, however, remains above body temperature throughout the smoking period, usually somewhere below 120°. Near the end of the period, smoke temperature may rise to 130° but seldom to the point of discomfort or danger.

YOUR CHOICE IS BEST

As we have said before, the best tobacco for you is the one you like best. If you can find a brand that produces slow, even, smooth burning with no acrid taste, stick to it, and you will probably grow to prefer it to all others.

If you're a beginning pipe smoker, or a veteran who's looking for a new blend, you might like to try some of the following mixtures. You can use them as starting points and then vary the proportions to suit your own taste.

1. Perique, $\frac{1}{4}$ oz.; Virginia, $\frac{1}{2}$ oz.; Burley, $\frac{1}{2}$ oz. This is a simple, basic blend.

2. Perique, ¼ oz.; Latakia, ¾ oz.; Kentucky Burley, ½ oz.; Virginia, ½ oz. 3. Irish Bogie, ¼ oz.; Maryland, ¾ oz.; Carolina Cavendish, 1 oz.; Turkish, ¼ oz.; Burley, ½ oz. Highly aromatic.

Brands are listed below in alphabetical order without regard to price or quality. The first comments in each case are those of a tobacco consultant who surveyed the market for CU. The additional comments

were made by other experts and pipe smokers consulted by CU.

Blue Boar. Very sweet; bad taste and smell.

Additional comment: Rather heavy, rich
mixture; fairly sweet.

Bond Street. Slightly sweet; mild. Additional comment: 1. Too aromatic for characterless tobaccos that make up the rest of the mixture; 2. Good.

Bowl of Roses. Perfumed smell; bad taste.
Briggs. Very sweet; doesn't hold fire. Additional comment: Good.

Buckingham. Mild; bad taste and smell. Carleton Club. Sweet; bad taste.

Dill's Best. Slightly sweet; mild.
Edgeworth. Slightly sweet; mild. Additional comment; Mostly straight burley; too fine-cut.

George Washington. Flavored; sweet; mild. Additional comment: Tasteless alone; makes good base.

Granger. Licorice flavored; sweet; bad taste and smell. Additional comment: 1. Good inexpensive base for mixing with more tasty tobaccos; very rough cut; too gummy alone; 2. Fair.

Half and Half. Sweet; bad taste and smell. Additional comment: Mostly straight burley; too fine-cut.

Heine's Blend. Flavored; sweet; bad taste. Additional comment: Mild; medium-cut; smooth; sweet.

Kentucky Club. Sweet; bad taste and smell.

Model. Flavored; sweet; bad taste. Additional comment: Poor.

Prince Albert. Slightly sweet; mild.
Revelation. Flavored; sweet; bad taste.
Additional comment: Too hot and flaky;
sweet Virginia taste.

Rum and Maple. Mild. Additional comment: Fair.

Serene. Flavored; sweet; bad taste. Additional comment: Tasteless alone; makes good base.

Sir Walter Raleigh. Sweet; bad taste and smell.

Tuxedo. Mild; bad taste and smell.
Union Leader. Slightly sweet; mild. Additional comment: Tasteless alone; makes good base.

Velvet. Slightly sweet; mild.

Walnut. Flavored; sweet; bad taste. Additional comment: 1. Excellent taste, though probably too strong for beginners; too finely cut; 2. Excellent.

Ice Cream Mixtures

IN ANSWER to a number of requests from members, CU has undertaken tests of ice cream mixtures which can be prepared in the home. A report on the test results will appear in an early issue.

These mixtures come as powders or liquids, requiring the addition of whipping cream and fresh or evaporated milk; or ready-to-freeze, requiring no added ingredients ("Just freeze and serve").

The report will give some idea of the time required to prepare these mixtures,

The report will give some idea of the time required to prepare these mixtures, will compare their cost with that of ready-to-eat ice cream, and will present the results of taste tests.

Cooking Fats and Oils

. . . are produced in bewildering variety today. CU reports on their costs, uses and nutritional value. Ratings of 49 brands of vegetable oils, hydrogenated shortenings and lards are given

"Which fat makes the best shortening?"

"What are the nutritional values of different fats?"

"What are their relative costs?"

Inquiring CU members have been popping these questions at us for some time. And we don't blame them for being perplexed. There have always been enough different kinds of fats to make the matter of choosing the right one for the right purpose difficult.

And now a wave of new advertising claims is making things even more bewildering. The housewife is faced by a multitude of "triple-creamed," "specialprocessed," "modern blend" products. Certainly, deciding which fat of the land the family is going to live on has become a major household problem.

WHAT FATS DO FOR YOU

Pars and oils are derived from both animal and vegetable sources. In general, they do several things for the body. They are a cheap source of energy; they satisfy appetite and add to the palatability of other foods; most of them provide certain necessary fatty acids; and most contain small and variable amounts of fat soluble vitamins.

Fats also take longer to digest than other types of food. Because of their energy content (twice that of carbohydrates and proteins) and slow digestibility, fats will provide sustained energy over a long period of time. Thus, their nutritional value is particularly high in times of food scarcity.

Recently, some animal experimental work has suggested that certain fats are necessary to health because of their content of "essential" fatty acids. So far this work has had application only to the feeding of infants. Certain varieties of eczema in infants are said to be due to the feeding of a diet whose fat content is derived solely from butterfat—a fat lacking in essential fatty acids. But the average child or adult gets enough essential fatty acids from other animal and vegetable fats that are invariably included in the diet.

It is appropriate to remember, however, that butter, because of the complete absence of essential fatty acids, is not the perfect fat it is supposed to be, Like all fats, it is valuable for its energy content and it is superior to other fats with respect to its taste. Also, it contains substantial quantities of vitamin A.

Fats as a whole are not particularly good sources of the vitamins A, D and E which are found in them.

Certainly cooking fats should never be purchased with reference to their vitamin content. The latter is too small and variable to be dependable and, furthermore, much of the vitamin is destroyed by the high temperature at which cooking occurs.

When butter is expensive, oleomargarine fortified with vitamin A may be bought as a substitute. The margarines have a higher caloric value than butter but are supposed to be less palatable. However, most margarines are churned in milk and often cannot be distinguished from butter in taste.

While fats are useful energy sources, there is a limit to the amount that can be eaten with any satisfaction. Some people can't tolerate certain fats at all. Others get a stuffy, overfilled feeling after eating very little of a particular fat. But despite advertising claims, one type of fat is just as digestible as another. When indigestion does occur, it is due to individual sensitivity of the digestive tract to a particular fat. Says Dr. Walter C. Alvarez of the Mayo Clinic:

As far as I know it doesn't make any difference to the average person with a good digestion which fat is used in a shortening or in mayonnaise. The only person who is decidedly influenced is the man who happens to be highly sensitive to one of the oils. If he gets hold of the wrong one he is going to be ill.

Dr. C. M. McCoy, a leading worker in fat nutrition, says:

In regard to the digestion of fried foods, I may say that the common impression that fried foods are harder to digest is based first upon the fact that foods tend to remain in the stomach for a long period if they are rich in fat, and in the second place, that fat tends to surround the protein and carbohydrate particles, preventing their digestion until the fat covering has been digested away.

Fried foods apparently agree least with people with disorders of the gall bladder, bile ducts or liver. Because of impairment in quality and quantity of bile, edible fats, whether fried or not, are not completely digested and utilized.

In general, it may be said that all the commonly used fats and oils, irrespective

of composition and method of use (frying, &c.), are digestible.

HOW FATS ARE USED

Fars are used mainly for frying, shortening and flavoring. Although some fats can be used for all these purposes, there's usually one type which fills the bill particularly well for each use.

FRYING Deep-fat frying requires a fat with a high cracking point (the point at which it begins to smoke), such as hydrogenated vegetable oils. Lards with low cracking points are bad, for they develop pungent odors and off-flavors at the necessary high temperatures. Deep-fat frying, in a manner of speaking, simply allows the food to stew in its own juice. For the brown outer crust that begins to form as soon as the food is immersed in the hot fat forms an effective barrier against further fat penetration.

You can save the fat that has been used for deep-fat frying and use it again for the same purpose (but not for shortening), provided you've been careful not to let the fat become too hot and smelly. Simply strain the warm fat to remove food particles, and store it in a cool place.

Pan-frying, or sautéing, is a technique of frying which uses lower temperatures than the deep-fat method. Here the fat penetrates more deeply into the food, and the fat, rather than the food itself, is the cooking medium. Bland fats are generally considered best for sautéing, although butter and olive oil do give a characteristic flavor which makes them suitable for some dishes.

SHORTENING Shortening in pastries and cakes makes their texture soft and flaky. Different types of shortening produce varying textures: hard fats (lard, hydrogenated oil, oleomargarine, butter) are generally best suited for cakes and pastries. Oils also make tender pastries, although the texture is likely to be mealy rather than flaky.

For shortening biscuits, muffins and other quick breads, almost any fat or oil with a good, bland flavor may be used.

FLAVORING As spreads, butter and oleomargarine (especially the fortified type, which has added vitamins A and D) are satisfactory and, of course, widely used. A mixture of the two gives a butter-flavored spread at a price lower than that of butter alone.

For salad dressing, olive oil is the classical base, because of its characteristic flavor (aside from the flavor it has no superiority to other fats). But cottonseed oil or corn oil make acceptable substitutes, particularly if other flavorings are added.



SOME FATS OF THE LAND

They are all good sources of energy but they differ widely in flavors, uses and costs.

The four brands shown are among the best buys found in CU's tests

THE FATS AND OILS

Butter is one of the most satisfactory all-round fats, both in taste and nutritional value. Although it lacks the essential fatty acids, it contains substantial amounts of vitamin A, and some vitamin D, particularly in the summer time. It has a special bland flavor, which makes it satisfactory for a variety of uses, as a combination shortening and flavoring.

Oleomargarine, most setisfactory of the butter substitutes, is made either from animal or vegetable fats, and churned in milk. The flavor is bland, and the fortified variety, with added vitamin A and D, is an excellent buy.

Lard is of several types "leaf" lard, made from the internal fatty tissues of the hog, is considered best; "back" lard, rendered from surface tissues, is satisfactory, but it should cost much less. Some manufacturers use the word "leaf" in their brand name, but this doesn't necessarily mean that the product is a leaf lard. A separate statement on the package indicates the source, either as "leaf lard" or as "rendered pork fats."

Look for the legend "U. S. Inspected and Passed by the U. S. Dep't of Agriculture" on all animal fat labels.

Oils, such as cottonseed, peanut, and soybean, are being produced under refining processes which have become so highly developed that all of them have bland flavors. Their low price makes them especially suitable as substitutes for the much more expensive clive oil.

Hydrogenated oils, such as the widely advertised Crisco and Spry, are nothing more than ordinary vegetable oils which have been hardened by processing with a harmless, tasteless gas (hydrogen). They are excellent for a variety of uses, and it is interesting to note that competition among manufacturers is so strong that they are frequently cheaper than the liquid oils from which they have been made.

TESTS AND PRODUCTS

CU technicians tested 15 brands of vegetable oils, 21 brands of hydrogenated oils, and 13 brands of lard. Samples of each were examined for cracking point, free acidity, degree of saturation, keeping quality, relative solidification, &c. Factors such as taste, odor, and packaging were also considered, though given less importance in the ratings.

Prices given in the ratings are those of March, 1941. Since that time fat prices have been rising, in spite of large stocks on hand. Because vegetable oils are for the most part by-products of the cotton industry, and lards by-products of the meat industry, their prices fluctuate with the general market conditions in these industries.

As the meat and cotton industries are sure to be affected by the defense program, CU recommends that housewives stock up on fats with good keeping qualities, to avoid rising prices.

The following table shows the best

uses of cooking fats on a basis of price and quality. Those listed first are your "Best Buys."

 General Use
 Frying
 Shortening

 Vegetable
 Hydrogenated
 Lards

 Oils
 Oils
 Hydrogenated

 Lards
 Oils
 Oils

 Hydrogenated
 Vegetable
 Vegetable

 Oils
 Oils
 Oils

VEGETABLE OILS

Prices given are for 1 pint sizes, except where otherwise noted. All oils listed are suitable for cooking and for salad dressings,

Acceptable

(In approximate order of quality without regard to price)

Rokeach Peanut Oil (I. Rokeach & Sons, Brooklyn, N. Y.). 22¢.

Gold Medal Soya Bean Oil (Garber-Eagle Oil Corp., Brooklyn, N. Y.). 19¢. Packed in bottle.

Wesson Cottonseed Oil (Wesson Oil & Snowdrift Sales Co., New Orleans). 24¢. Rajah Cottonseed Oil (A&P, NYC). 18¢. Jewel Cottonseed Oil (Swift & Co., Chi-

cago). 22¢. Packed in bottle.
Co-op Soya Bean Oil (National Co-Operatives, Chicago). 17¢. Packed in bottle.

Hi-Hat Peanut Oil (Planter Edible Oil Co., Suffolk, Va.). 25¢. Rokeach Cottonseed Oil (I. Rokeach &

Sons). 21¢.

Mayday (Table Products Inc., Los Angeles).

15¢. A vegetable oil. Misbranded: label failed to declare type of oil ingredients. **Pride of the Home** Soya Bean Oil (Garber-Eagle Oil Corp.). 37¢ per qt.

Mazola Corn Oil (Corn Products Refining Co., Argo, Ill.). 24¢.

Italian Cook (Agash Refining Corp., Brooklyn, N. Y.). 18¢. A vegetable oil. Misbranded: label failed to declare type of oil ingredients.

Yolanda Cottonseed & Corn Oil Mixture (C. F. Simonin's Sons, Inc., Philadelphia). 30¢ per qt.

Royal Cook Corn & Cottonseed Oil Mixture (Agash Refining Corp.). 19¢ per 1½ pt. Bohack's Cottonseed Oil (H. C. Bohack Co., Brooklyn, N. Y.). 21¢ per 12 fl. oz. Packed in bottle.

HYDROGENATED VEGETABLE OILS

Prices given are for 1 lb. sizes, except where otherwise noted.

Best Buys

Red & White (Red & White Corp., Chicago). 38¢ per 3 lbs. Highest quality tested.

Co-op (National Co-operatives, Chicago), 14¢. Second highest quality tested.

Keen (Table Products Co., Oakland, Cal.).

11¢. Eighth in order of quality, but price
makes it a "Best Buy." Packed in carton.

(continued on page 210)

Technical Section • 209

Also Acceptable

(In order of quality without regard to price)

Durkee's (Durkee Famous Food, NYC).

15¢. Samples of same brand purchased in middle west showed a lower quality, about equal to Formay below. They were available only in 3 lb. cans at 39¢.

Shurfine (National Retailer-Owned Groceries, Chicago). 16¢.

Spry (Lever Bros., Cambridge, Mass.). 17¢. Kea (I. Rokeach & Sons, Brooklyn, N. Y.). 18¢.

Marvo (First National Stores, Somerville, Mass.). 14¢.

Dexo (A&P, NYC). 14¢.

E-Z-Kreem (Selected Products, Inc., Chicago). 45¢ per 3 lbs.

Cream-White (Tri State Refining Co., Memphis, Tenn.). 15¢.

Formay (Swift & Co., Chicago). 15¢. Snowdrift (Wesson Oil & Snowdrift Sales Co., New Orleans). 15¢.

Krogo (Kroger Grocery & Baking Co., Cincinnati). 15¢.

Bake-Rite (Wilson & Co., Chicago). 13¢. Royal Satin (General Food Products Co., Oakland, Cal.). 15¢.

Tex (Armour & Co., Chicago). 15¢.

Jewel (Swift & Co.). 12¢. Packed in

carton.

Crisco (Procter & Gamble, Cincinnati). 17¢.

Eluffa (Procter & Gamble). 12¢. Packed

Fluffo (Procter & Gamble), 12¢. Packed in carton.

Vegetole (Armour & Co.). 10¢. Packed in carton.

LARDS

Prices given are for 1 lb. sizes, except where otherwise noted.

Acceptable

(In order of quality without regard to price) Gobel's (Adolph Gobel, Inc., NYC). 19¢.

Country Club (Kroger Grocery & Baking Co., Cincinnati). 27¢ per 2 lbs. Packed in can. Leaf lard.

Silverleaf (Swift & Co., Chicago). 17¢. Not a leaf lard.

Star (Armour & Co., Chicago). 12¢.

Snow Cap (John Morrell & Co., Ottumwa, Iowa). 15¢ when purchased in New York. Samples of similar quality were purchased in Philadelphia at same time for 10¢.

Kingan's (Kingan & Co., Indianapolis).

Cedar Valley (Rath Packing Co., Waterloo, Iowa). 15¢ when purchased in New York. Same quality samples purchased in Philadelphia at same time for 10¢.

Puritan (Cudahy Packing Co., Chicago). 13¢, Leaf lard.

Laurel-Leaf (Wilson & Co., Chicago). 14¢
when purchased in New York. Same quality samples purchased in Philadelphia at
same time for 10¢. Not a leaf lard.

Stahl-Meyer (Stahl-Meyer, Inc., NYC).

Sunnyfield (A&P, NYC). 11¢.

Hormel (Geo. A. Hormel & Co., Austin, Minn.), 10¢.

Hygrade (Hygrade Food Products Corp., NYC). 13¢.

How To Cut Your Fuel Bill

Shortages, transportation difficulties and price rises threaten the heating fuel market. To help meet the situation, CU's consultants give some advice on getting maximum heat at minimum cost, together with ratings of oil burners and coal stokers

GETTING more heat for their money is becoming a number one consideration with homeowners today. People who remember the \$20-\$30 coal of World War days are busy wondering how they can economize on fuel in case the threatened shortage materializes.

And all signs point to a shortage, especially in oil. Talk about gasless Sundays has been supplemented by rumors of heatless days for oil burner owners. It's more than possible that the transfer of oil tankers to Great Britain will cause an oil shortage in the northeastern states. In line with these events Petroleum Coordinator Ickes has cast doubts on the wisdom of installing a new oil burner in a home, emphasized that steps should be taken to cut the consumption of burners already installed, and warned that eventually the owner of an inefficient oil burner may be penalized by having his oil supply cut off.

Coal users haven't received official warnings of shortages yet. But there's no certainty that they will be spared high prices. For one thing, price control is less likely to come in the coal industry than the oil, since oil lends itself to regulation more easily, and is more important for war needs.

Besides, enormous amounts of bituminous coal are being used in defense plants, removing that much from the domestic supply. And there are shortages of freight cars for transporting coal.

While most homeowners are willing to suffer inconveniences and even hardships during a national emergency, they may not be so complacent about largescale profit-grabbing on the part of opportunistic companies. As in other industries, it seems to be happening in fuel.

Independent fuel oil retailers and oil burner manufacturers claim that the major oil companies are secretly delighted about the "oil scare" and are going out of their way to increase the public's apprehension about future availability of oil. Motives: to take retail business from independent fuel oil dealers by claiming that a homeowner stands a better chance of getting oil next winter if he signs a contract with a major company; and to prepare the way for unprotested price uppings once

homeowners have been impressed with the fact that they're lucky to get oil at any price.

In coal, similar conditions appear to exist. Retailers are having difficulty getting the amounts, grade, and quality of coal they desire, as wholesale yards are accused of planning shortages to bring the small retailer and consumer to their knees.

In view of these trends, CU's advice to all homeowners is to buy as much of your winter fuel now as possible. In 60 or 90 days prices may have shot up, but as yet they're reasonable. Stocking up on oil is especially important, because you cannot get a contract from your dealer for oil throughout the winter at a fixed price, as previously.

It's a good investment to increase your fuel storage facilities right now if you can afford it. A coal bin or oil tank which holds half the amount of fuel used in one year isn't too large. It will be useful after the emergency passes, for with it you can stock up on fuel during seasons when prices are low.

10 WAYS TO SAVE FUEL

CU FIELD tests revealed that appalling amounts of fuel are wasted annually because typical American homes retain heat poorly. To meet that situation, CU's consultants have drawn up a 10-point program for reducing fuel consumption by 35% to 65% in an average home.

1. Place a 4" layer of rock wool over the upper story ceilings. This will cut the loss of heat through the attic or roof.

2. Fit the window of every room heated to 70° with a tight-fitting storm window. Put a tight-fitting storm door, preferably with a vestibule arrangement, over every door leading to the outside of the house.

3. If your windows are loose, tighten them by removing and re-setting properly the inside wooden strips which the windows slide against. A snug-fitting window can be made to slide easily by applying soap or wax.

Don't go in for expensive metal weatherstripping. Dollar for dollar, storm windows are a much better in4. Don't use any more heat than is needed for health and comfort. Heat your house only to 70° in the daytime. Keep the heat turned off in seldomused rooms, and in bedrooms. Don't waste fuel by sleeping with bedroom windows open and the heat turned on.

5. Have both your heating plant and oil burner or stoker, if you own one, checked for defects which cause high fuel consumption. It's a good idea to have a dealer or engineer check your stoker or burner to see if it's wasting fuel. If necessary, get a larger boiler or furnace, additional radiators, or replace broken parts. The immediate outlay will be justified by lower fuel consumption.

6. If you use hand-fired coal, install an automatic damper regulator and room thermostat. You should be able to get both for about \$10 or a set with an electric clock thermostat for just under \$20. Installation—if you can't do it yourself—runs about \$3.50 to \$5.

Make sure that the damper you get or already have—banks the fire fully when the thermostat indicates that the house is warm enough. (CU field tests showed that too many damper regulators failed to bank the fire completely with the result that rooms became too warm and fuel was wasted. Sometimes adjusting the damper and chains will correct the difficulty; other times, an additional damper has to be installed.)

7. If you fire by hand, try switching to smaller and less expensive grades of coal, such as pea or buckwheat. An ash pit blower may be needed to make this possible.

8. If you have a steam boiler, with or without a jacket, have it insulated

with a two-inch covering of "85% magnesia" blocks cemented in place with asbestos. Or else use a two-inch layer of rock wool. (The rock wool is decidedly preferable but it's more difficult to install on an unjacketed boiler.) In addition, make sure that all the basement heating pipes are properly covered by insulation in good condition.

9. Have the chimney draft tested with a draft gauge. If it's excessive install an automatic smoke pipe draft regulator. It costs only \$1.50 to \$4.00 and you can probably do the installing yourself. Regulators work just as well with handfired heaters as with plants fired by stokers and oil burners.

10. Brush up on the technique of properly operating your heating plant; call in outside expert advice, if necessary—heating engineers, dealers or representatives of manufacturers. For pointers on how to get the most from your fuel in hand-fired heating plants, see box below.

Enterprising manufacturers will probably take advantage of the fuel shortage and price-rise to throw on the market a host of gadgets designed to serve as "fuel savers" and "conomizers." CU advises its members to steer clear of such equipment. The only means of producing fuel economy in a defective plant is to have the defects repaired; the addition of a "fuel saver" won't do much good. On the other hand a plant in good condition won't produce any more heat for a given amount of fuel when equipped with a makeshift fuel saver. Instead, the efficiency of the plant may be impaired.

OIL, COAL, GAS?

WHAT fuel you choose for your heating plant depends on how much you care for convenience and how much for economy. In general the most convenient firing methods are the most expensive.

Gas heat, for instance, is practically ideal. The gas-using homeowner doesn't have to order fuel; he has an almost silent plant; and in many cases he gets free service from the gas company—turning on and off the heat and making repairs. But where it's necessary to use manufactured gas, costs are usually too high for average homeowners. It costs at least \$200 a year as a rule to heat a six-room house with manufactured gas.

If, however, you live where natural gas is abundant and cheap, you can have the advantages of gas heat at relatively low cost. For about \$95 worth of natural gas is the equivalent of about \$170 worth of manufactured gas.



DRAWN FOR CU BY B. TAGAV

TO CUT YOUR FUEL COSTS

... make your house easy to heat, eliminate heating plant defects, and don't use heat when you don't need it. The diagram above shows six steps to take, together with the percentage of your total fuel bill which each step can save.

If you do everything that's indicated, the separate savings will be somewhat less than shown. About 60% of your fuel bill is the maximum saving possible.

Oil heat is not quite so convenient as gas heat, but less expensive. So for a great number of people oil heat, with its freedom from shoveling fuel and removing ashes, represents the maximum of heating convenience within financial reach.

Because of the impending shortage of oil, this is not a good time to invest in an oil burner. But if you're determined to have oil heat, be wary about your buying. For one thing, don't buy an oil burner until you find a local fuel oil dealer who will guarantee to supply you with oil throughout the winter.

Most important, don't buy a special oil-burning furnace or boiler which can't be fitted with grates and converted to hand firing. In many cases you can use your old hand-fired heating plant with a new oil burner. This arrangement is economical and safe; for if the oil supplies fail or prices rise to a prohibitive level, you can fall back on hand-fired coal.

After oil in terms of convenience and economy comes stoker firing—again less convenient but more economical. Stokers are made for both anthracite and bituminous coal; which one you buy depends on which type of coal is widely used in your area. Bituminous stokers cost less to run, but don't install one if you live in a section where anthracite is the common fuel.

Although the initial cost and the fuel cost of anthracite stokers are higher, they give more luxurious heat than bituminous stokers. Their fires need little attention, and ashes are removed from the pit automatically.

With bituminous stokers the fires must be tended frequently, and in almost all models clinkers must be removed from the firebed by hand.

At the present time, the "Best Buy" in firing methods for thousands of homeowners is good, old-fashioned hand-fired coal. Although high-pressure advertising for stokers and oil burners has tried to convince the public that anything but automatic firing is antiquated and disgraceful, CU's heating consultants find that hand firing on the contrary has several distinct advantages.

You can have automatic heat by installing a damper regulator and room thermostat. Yet you don't have to spend money for electricity (which is used by a stoker and burner) or for frequent repairs and replacement. And if the heater is in good condition and the fire properly tended, hand firing can produce heating comfort every bit as good as that produced by a stoker or oil burner.

The homeowner with a hand-fired plant can install an oil burner or a

stoker at any time, so he loses nothing by buying the simple grate-equipped heater in the first place. Like oil burners, coal stokers are something of a risky investment right now, since the types of fuel (small lump) used in stokers may become scarcer and more expensive than ordinary coal for hand firing.

A magazine-type boiler or furnace is a good buy for the low-income homeowner who wants modern heating comfort at a minimum cost. It uses no electricity and doesn't require expensive servicing. Since it has no motor driven parts, it's silent.

It can be automatically controlled by a room thermostat. About twice a week you fill the coal magazine and take the ashes from the ash pit.

HOW TO BUY AN OIL BURNER

When you buy an oil burner, remember that the brand is not nearly so important as the quality of the installation work. Any of hundreds of makes of burners will give excellent performance if it is installed and serviced properly. So look for an able, conscientious dealer rather than for a particular brand. Particularly, find a dealer who is capable of installing a burner so that it won't waste fuel. Some dealers bungle the job to such an extent that oil bills run from 30% to 100% higher than necessary.

Although the brand isn't too important, the type of burner is. Give preference to a "pressure-type gun burner" made up of standard parts. Don't buy a burner which has special parts and supposedly unique "features." Such parts cause trouble. They're invariably high-priced and when they break, as they frequently do, they can be replaced only by certain manufacturers, who generally charge extra high rates for the replaced parts.

Before you sign, get a guarantee from the dealer that the burner, when operating normally and without perceptible chimney smoke, will produce flue gases with at least 10% carbon dioxide (CO₂) in them. Any dealer handling a good, efficient burner, and with the skill to make a good installation, should be willing to give this guarantee. If you can't get it from the dealer, but still want to buy from him for some reason, try to get the guarantee from the manufacturer. The manufacturer may supervise the installation work and make the tests of the burner.

Don't be led into buying a burner just because it bears a large manufacturer's name. It may not be made by him, but instead by small companies. CU's consultants found oil burners bearing the name plates of Carrier Corp., Fox Furnace, Holland Furnace, Kelvinator, Norge and Westinghouse which were products of other—and generally smaller—manufacturers.

Above all steer clear of new, unique features offered by companies to make their brands different from other burners. (See rating on *Delco*.) In many cases good performance and efficiency are sacrificed for uniqueness. You get all the disadvantages of special, hard-to-replace parts and not technically perfected mechanisms.

HOW TO BUY A COAL STOKER

As WITH oil burners, you should pay more attention to the integrity and engineering ability of the dealer than to the brand of stoker. Though some stokers have superior construction, it's better to buy a somewhat inferior stoker from a good dealer rather than the best stoker from an incompetent dealer. As a rule, however, good dealers will carry good stokers.

Don't buy a stoker just to cut your heating expenses, because you may be disappointed. Although stokers do use cheaper grades of coal, they don't always result in savings. Because they're automatically controlled, stokers keep a house warm all the time.

If a homeowner hasn't kept his house warm with hand firing, he'll find that a stoker—which does keep it warm—uses more fuel.

When you compute all the costs involved in buying and operating a stoker—the yearly depreciation, interest charges, service costs, electricity (\$20 a year in places where it costs 5¢ per kwh)—you may find that a stoker won't appreciably lower your heating bill.

The main reason for buying a stoker is convenience. Besides requiring infrequent tending, a stoker gives freedom from the smoke and soot of hand firing, especially if bituminous coal is used. For the greatest dependability, give preference to models which have hoppers rather than bin feed models.

When you buy an anthracite stoker, make sure that it has automatic ash removal features. Have it adjusted so that it deposits 25% to 35% of unburned coal along with the ash. It may seem unbelievable, but a stoker which does this gives the greatest efficiency and lowest fuel bills.

Before you buy a bituminous stoker, find out if it will burn the types of bituminous coal which are available at low prices in your locality. Also, check to see if homeowners using that make in your vicinity have had favorable experiences with it.

OIL BURNERS

All pressure-type gun burners are "Acceptable" if they are made of standard parts and sold with a 10% CO₂ guarantee. Because there are hundreds of brands, only a few representative and well-known makes are mentioned in the ratings.

Because prices vary from city to city, no prices are given. In general, you can consider \$185 to \$240 a suitable price to pay for a complete installation including a good burner, complete controls, 275-gallon storage tank, and one year's service. See that you get a well-planned, durable firebox, automatic draft regulator, and a tank gauge.

PRESSURE-TYPE GUN BURNERS

This is the best type of burner—simple, rugged, made of standard parts, easily serviced, and less expensive than vertical rotary burners.

Acceptable

(Order is alphabetical and has no significance)

ABC (Automatic Burner Corp., Chicago).
Airtemp (Chrysler Corp., Detroit).

Arco-Flame (American Radiator Co., NYC).

Caloroil (Caloroil Burner Corp., Hartford,

Carrier (Carrier Corp., Syracuse, N. Y.).
Esso-Heat (Gilbert & Barker Mfg. Co.,
Springfield, Mass.).

Fluid-Heat (Anchor Post Fence Co., Baltimore).

Gar Wood (Gar Wood Industries, Detroit). Kleen-Heet (Kleen-Heet, Inc., Chicago).

National (National Radiator Corp., Johnstown, Pa.).

Paragon (Paragon Oil Burner Corp., Brooklyn, N. Y.).

Petro (Petroleum Heat & Power Co., Stam-

ford, Conn.). Quiet-Heet (Quiet-Heet Mfg. Co., Newark,

N. J.).
Rexoil (Rief-Rexoil, Inc., Buffalo, N. Y.).
Timken (Timken Silent Automatic Co., De-

Toridheet (Cleveland Steel Products Corp., Cleveland).

Williams Oil-O-Matic (Williams Oil-O-Matic Heating Corp., Bloomington, Ill.).

Not Acceptable

Delco (Delco Appliance Division of General Motors). "Roto-power" oil pumping unit, special electric motor and controls did not give as dependable performance as burners with standard parts. Service charges could run high because standard parts don't fit this burner.

Electrol (Electrol, Inc.). Had special oil pump and regulating valves. Not so dependable and easy to service as burners with standard parts. Special "Master Control" not so safe as standard electric control systems, such as those made by Minneapolis-Honeywell.

General Electric (General Electric Co.).
High-priced, and not desirable because of special parts and features.

Masterkraft (Harvey-Whipple). Sales literature makes much of the "Tripolator" fuel saver, but CU's consultants found it worthless. Its "Borcontrol"—another special feature—was flimsily constructed and proved troublesome on many installations.

Quiet May (May Oil Burner Corp.). Sold at premium prices, not justified. Standard parts are preferable to "Gerotor" oil pumping unit and jewel tipped nozzle used.

Sears' Hercules (Sears-Roebuck). Inferior engineering, installation, and service often comes with this brand, because Sears-Roebuck "experts" are usually salesmen who know relatively little about heating. Too often the installation job is given to local lowest bidders who employ cheap unskilled help.

VAPORIZING BURNERS

Vaporizing (Pot-type) burners are "Not Acceptable" as firing equipment in ordinary boilers designed for coal. For heating typical homes they perform poorly, breaking down frequently and producing smoke, carbon, soot, chimney fires, and often requiring the use of high-priced fuel oil or kerosene. They may be somewhat more satisfactory for exceptionally small warm air furnaces and boilers serving only two or three small hot water radiators. As integral parts of

special warm air furnaces they give good performance.

VERTICAL ROTARY BURNERS

In general, these are poor buys compared to pressure-type gun burners. However, for some heating plants vertical rotary burners will give lower fuel bills than gun burners. And if the most competent local dealer prefers vertical rotary burners, it may be wise to buy one.

Acceptable

(Order is alphabetical and has no significance)

Fluid-Heat (Anchor Post Fence Co., Baltimore).

Timken (Timken Silent Automatic Co., Detroit).

Toridheet (Cleveland Steel Products Corp., Cleveland).

Not Acceptable

ABC (Automatic Burner Corp.). Electric ignition installation proves troublesome, gives violent starts which sometimes throw the boiler doors open. Gas ignition models run up unnecessarily high gas bills. The burner depends considerably on natural chimney draft because it lacks the standard oil burner fan or blower. The unusually high speed motor needs periodic, highly specialized attention.

... If You Use a Shovel

FOR thousands of homeowners, hand-fired coal is still a "Best Buy." To help owners of hand-fired heating plants get a maximum of heat at minimum cost, CU presents this 10-point program:

CLEANING AND REPAIRING

- 1. Clean the chimney and smoke pipe. Replace the smoke pipe it it's worn out.
- 2. With a wire flue brush clean the inside surfaces of the boiler or furnace thoroughly. Do this at least three times during the heating season.
- Inspect the dampers, grates, firing and flue doors for defects; make necessary repairs and replacements.
- A. Look for cracks and openings which permit cold air to enter the furnace or boiler. These are usually found around the boftom and top of the sah pit, around grafe fittings, between cast iron sections, and at points where fire and flue door frames join the boiler. (If you don't know how to find cracks by "candling," ask your local coal dealer.) Use furnace cement to seel cracks; it's a good idea to keep a can on hand.

FIRING

- 5. Burn the smallest, least expensive size of coal which will give you good heating. If you can't use pea coal entirely, because your chimney draft is poor, buy larger coal (egg, stove, nut) to start the fire and produce heat quickly in the morning. The use the pea coal during the daytime and for banking.
- 6. Keep a generous amount of coal on the grates, even when the fire is banked. When adding fuel, fill up the firebox to the level of the bottom of the firing door in front, and to a few inches above this in

back. It you can't cut off the heat sufficiently when you have this much fuel in the firebox, there's something wrong with the dampers. It may help to install an additional damper. In any case, it's wasteful to operate a heating plant which won't permit banking with considerable amounts of fuel.

Twhen you add fresh coal to the fire, leave glowing coals exposed somewhere in the firebed. These help ignite combustible gases released by the fresh coal, and so make the most of all the burnable elements in the fuel. Also, they eliminate chances of "gas puffz" or explosion.

or gas pure or explosion.

It may be necessary to open the slots in the firing door for 10 to 20 minutes after the coal has been added to provide oxygen to burn the gases. But keep these slots closed at all other times, so that cold air won't enter.

8. Never bank the fire by leaving the firing door open. It's a sure way to waste fuel. It you can't bank the fire sufficiently without opening the door, there's something wrong with the dampers.

9. Shake the grates only enough to cause a scattering of live coals to appear in the ash pit. If you have difficulty in holding back the fire in mild weather, omit shoking for a day, so that a layer of ashes accumulates on the grates.

10. Don't get into the habit of disturbing the firebed too much. Some people use the grate shaker bar and the poker several times a day—needlessly. It wastes fuel and may cause clinker trouble, especially it you burn bituminous coal.

OIL BURNER PARTS

CU's consultants, on the basis of tests and field research, found that the best oil pumping unit was made by Webster, and that pumps by Sundstrand, Tuthill and Viking were "Also Acceptable" (in this order). Minne-apolis-Honeywell electric controls were found to be best; either Detroit Lubricator, Mercoid, or Penn Electric Switch controls were equally good second choices. Perfex controls, however, were found to be "Not Acceptable."

Although there are slight differences in various makes of motors, ignition transformers, nozzles, ignition assembly parts, blowers, most well known makes will give satisfactory service.

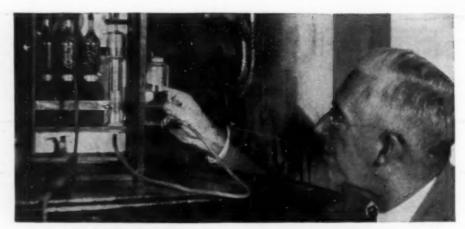


ANTHRACITE STOKERS

Any of these stokers will give good results if installed and serviced by an expert dealer. Other makes not mentioned here should be considered if they can be purchased from a reputable dealer.

Best Buy

Electric Furnace-Man (Electric Furnace Man, Inc., NYC). Has revolving retort which gives even-burning, efficient firebed. Ashes removed automatically from windbox. Special blower wheel for proper air pressure, "Ash-wipers" which remove crusts of ashes from the edge of the retort. Rugged ash-removal system of chainand-bucket type.



DOES YOUR OIL BURNER GIVE EFFICIENT COMBUSTION?

With an Orsat gas analyzer, a heating engineer can tell whether your burner produces the right percentage of CO, for efficient combustion of fuel

Acceptable

(Order is alphabetical and has no significance)

Anchor Kolstoker (Anchor Stove & Range

Co., New Albany, Ind.).

D&E (Dickson & Eddy, NYC). Wellengineered and sturdy. Where offered by a good dealer, this is generally a "Best Buy" for homeowners who desire a good stoker at rock-bottom prices.

Fairbanks-Morse (Fairbanks-Morse & Co., Chicago). High grade equipment for homeowners who can afford to pay higher than minimum prices. Revolving retort models are especially efficient; don't buy the stationary retort models.

Iron Fireman (Iron Fireman Mfg. Co., Cleveland, Ohio). Anthracite models are good, but not up to the excellence of

Iron Fireman bituminous stokers, and are often retailed at higher prices than the quality justifies.

Motorstoker (Hershey Machine & Foundry

Co., Mannheim, Pa.). Early bin-feed models reported troublesome, but current equipment is believed to be better.

Sears' Hercules (Sears-Roebuck). A good stoker at a low price. Installation and service work reported inferior in some localities, however. While this isn't quite so important with stokers as with oil burners, don't buy a Hercules stoker unless you can get assurance that the installation and servicing will be satisfactory.

Stokol (Schwitzer-Cummins Co., Indianapolis). Heavy construction: mechanical parts exceptionally well engineered; combustion equal to, but not superior to that of models selling at somewhat lower prices.

Heating Equipment and Fuel Cost Analysis

THIS table is for comparative purposes only. The figures are estimated for a six-room house and are based on the best average costs obtainable; but prices for equipment, fuel and power in a particular locality may vary widely from those given. Each buyer of heating equipment should prepare his own table for the equipment in which he is interested, based on local costs.

In accordance with actual experiences of homeowners, yearly fuel bills in the table below are based on the assumption that the home is heated better with automatic firing of any type than with hand-fired coal. If as much heat is used with hand firing as with an oil burner, for example, more hand-fired coal would be used than is estimated here.

Yearly fuel bills are computed according to the following costs: 9 tons of nut coal at \$13 per ton for hand firing; anthracite buckwheat staker coal at \$8.50 per ton; bituminous staker coal at \$6.50 per ton; fuel oil at 7¢ per gallon; manufactured gas at 65¢ per thousand cubic feet (520 Btu); natural gas at 65¢ per thousand cubic feet (1000 Btu); electricity at 5¢ per kwh.

COMPARATIVE COSTS USING PRESENT BOILER OR FURNACE

COMPARATIVE COSTS USING MODERN, SPECIAL FURNACE OR BOILER

	HAND-FIRED BOILER OR FURNACE— NOW USED	ANTHRA- CITE STOKER	BITUM- INOUS STOKER	OIL BURNER	CONVE GAS BL		MAGA- ZINE FEED BOILER	ANTHRA- CITE STOKER UNIT	BITUM- INOUS STOKER UNIT	OIL BURNER UNIT	FURNA OR BO Mid.	ACE
Equipment Cost, Installed		\$300	\$225	\$185	\$15	95	\$190	\$490	\$345	\$370	\$35	50
Yearly Fuel Bill	\$117	68	52	107	172	95	68	53	42	86	120	67
Depreciation & Replacement ^o		30	23	19	14	14	10	34	28	30	21	21
Service for Burner or Stoker		8	6	15					8	15		
Electricity for Motor		20	20	13	1	1		20	20	13	1	1
5 % interest on Investment		15	11	9	10	10	10	21	18	19	18	18
Total Yearly Cost	117	141	112	163	197	120	88	136	116	153	160	107

Since continued use of your present boiler or furnace involves no further expenditure, no depreciation or interest on the original cost of the boiler or furnace is included the charges.

mputed at 10% for anthracite and bituminous stokers and for oil burners used with present heating plant, and for oil burner units. It is computed at bituminous stoker units, at 7% for gas conversion burners, at 6% for gas furneces or boilers, at 5% for magazine feed boilers.

BITUMINOUS STOKERS

Acceptable

The following six stokers (in alphabetical order) were excellently constructed. When offered by reputable local dealers they should be given preference,

Anchor Kolstoker (Anchor Stove & Range Co., New Albany, Ind.).

Econocol (Cotta Transmission Corp., Rockford, Ill.).

H&H (Holcomb & Hoke Mfg. Co., Indianapolis).

Iron Fireman (Iron Fireman Mfg. Co., Cleveland). An excellent bituminous stoker, but not the only good stoker, as some dealers would have you believe. Not worth a great deal more than any other good stoker.

Stokol (Schwitzer-Cummins Co., Indianapolis). Superior combustion characteristics for certain coals which are difficult to burn in domestic plants. Especially rugged and trouble-free transmission.

Whiting (Whiting Corp., Harvey, Ill.).
Both the popular-priced "Standard Line"
models and the "Deluxe Line" models are
priced moderately for their engineering
and construction, and are capable of excellent combustion, when suitable coals
are used.

The following stokers (in alphabetical order) are of good average construction and are capable of excellent performance when installed and serviced properly—in plants suited to stoker firing.

Auburn (Auburn Foundry, Inc., Auburn, Ind.).

Combustioneer (Steel Products Co., Springfield, Ohio).

Conco (Conco-Sampsel Corp., Belleville, Ill.).

Delco (Delco Appliance Division of General Motors, Rochester, N. Y.).

Eddy (Eddy Stoker Corp., Chicago).

Fairbanks-Morse (Fairbanks-Morse & Co., Chicago).

Freeman (Illinois Iron & Bolt Co., Carpentersville, Ill.).

Gehl (Gehl Bros. Mfg. Co., West Bend, Wis.).

Kol-Master (Kol-Master Corp., Oregon, Ill.).

Link Belt (Link Belt Co., Chicago).

Master (Muncie Gear Works, Inc., Muncie, Ind.).

Original Pocahontas (Pocahontas Fuel Co., Inc., Cleveland). According to CU's data, this is the only well-known bituminous stoker which offers automatic ash or clinker removal.

Plymouth (Plymouth Industries, Inc., Plymouth, Ind.).

Stokermatic (The Stokermatic Co., Salt Lake City).

Tru-Temp (Sinker Davis Co., Indianapo-

Will-Burt (The Will-Burt Co., Orrville, Ohio).

Winkler (Winkler Mfg. Corp., Lebanon, Ind.).

MEDICAL SECTION

HAROLD AARON, M. D., SPECIAL MEDICAL ADVISER

MEDICAL CONSULTANTS: Dr. Anton J. Carlson—Chairman, Dep't of Physiology, University of Chicago; Past President, American Physiological Society; Dr. Theodor Rosebury—Assistant Professor of Bacteriology, College of Physicians & Surgeons, and School of Dental and Oral Surgery, Columbia University; Dr. Marion B. Sulzberger—Ass't Professor of Clinical Dermatology and Syphilology, New York Post-Graduate Medical School, Columbia University; Editor, Journal of Investigative Dermatology.

CU's Medical Consultants give technical advice on matters of medicine which lie within their fields. CU is responsible for all opinions concerning social, economic and public health questions.



The Vitamins You Need

... can't be obtained simply by swallowing capsules or eating vitaminized products. A balanced diet is the solution to the problem—whatever the ads claim

D EVELOPMENTS in the field of nutrition since the first World War have been nothing short of remarkable.

And particularly in these years have we made tremendous advances in our knowledge of the vitamins.

But the discovery of new food factors and the understanding of their importance for health have had contrasting effects. On the one hand it has made America food-conscious, an effect that culminated in the successful National Nutrition Conference for Defense recently held in Washington (see June Reports). On the other hand, progress in nutritional knowledge has put into the hands of quacks and unscrupulous manufacturers new weapons for consumer-exploitation.

The mark of quackery is usually easy to note. Emphasis on a single food or group of foods and denunciation of recognized dietary staples are characteristic of the food faddist. The one great lesson that nutrition research has taught is that all the necessary food factors—calories, proteins, fats, vitamins and minerals—can be obtained only if a wide variety of foodstuffs are eaten regularly.

The development of food research has had another unfortunate effect. Food and vitamin manufacturers, eager to profit from the public's interest in new food discoveries, swamped consumers with "vitaminized" cough syrup, candy drops, soft drinks and processed foods.

Even worse was the promotion of vitamin concoctions as the salvation for all our nutritional sins. "Shot-gun" vitamin capsules and syrups, compounded without consideration of special or general needs, filled the shelves of pharmacies until both doctor and the public were bewildered. The principal moral in all the promotion was that man had contrived to put into a capsule or a syrup all necessary vitamins and that one could eat and drink as casually as he wished if he bought sufficient nutritive protection from vitamin compounds.

Delegates at the National Nutrition Conference heard this nonsense condemned by some of the country's leading nutritional experts. Everyone agreed that vitamins had a very important place in the treatment of dietary deficiencies by physicians. Everyone also agreed that no vitamin preparation, no matter how potent, could take the place of a well balanced diet.

New vitamin factors are being discovered regularly and obviously no one has a right to claim that any one special preparation has all of the necessary factors.

So important has this principle of nutrition become that many doctors prefer to recommend the natural vitamin sources such as brewers' yeast or crude liver extract for the average case of dietary deficiency rather than the pure synthetic vitamins. The former, like our common foodstuffs, contain vitamins that have not yet been isolated.

[&]quot;Milk causes cancer" is an example.

After all, vitamin research is still in its infancy; who knows how many other important vitamins will be isolated in the future?

The only thing that appears certain is that when they are isolated they will be found in natural sources.

THE significance of a well balanced natural diet was well illustrated in a recent experiment conducted by Professor Marlin of the University of Rochester. He gave dogs six of the known synthetic B vitamins now available, together with a diet free from B vitamins. The dogs nevertheless showed evidence of a vitamin B deficiency which cleared up only when yeast was added or the diet rounded out.

Vitamin addicts would do well to keep this experiment in mind when they buy their next batch of shot-gun mixtures and behold the impressive number of vitamins listed on the label.

Another lesson from recent scientific work with vitamins is that proportion and balance between vitamin factors has a very important role in the utilization of the vitamins. An excess of one B vitamin, for example, can cause depletion of another. Thus, relieving one vitamin deficiency may result in the development of another.

All nutrition experts are agreed that in natural sources, such as food and yeast, the vitamins exist in that nice balance which is necessary to their proper utilization. Far too many vitamin preparations are compounded, not on the basis of known needs and proper proportions, but on the availability and cheapness of certain vitamins.

Many vitamin products are now being marketed with the boast that they contain large amounts of B₁ or thiamine. One of the best advertised—"Vitamin Quota"—claims 500 units per capsule and therefore insists on its superiority over other products having fewer B₁ units. As a matter of fact, the differences between various vitamin products in terms of units of B vitamins are becoming less and less. And if the proportion of one vitamin to another becomes too high consumers should buy with caution.

The new food guide of the National Nutrition Council should be consulted by anyone interested in the biology and economics of vitamins. It furnishes the most modern guide to the amounts of various food factors that go to make up a balanced diet.² What's more, the information it provides is a real help in evaluating the merits of the commercial vitamin preparations. And that is help of a sort that consumers can put to good use.

Don't Pour Vitamins Down the Drain

BECAUSE better diets are an important step in producing good physical and mental health, leading nutrition experts of the country got together and worked out a new food guide for the American people. This was the guide which was presented to delegates of the National Nutrition Conference held in Washington in May. A diet pattern corresponding to the guide was printed in the June Reports.

The next job is to get this diet to the millions of American families who need it. And serious economic obstacles stand in the way of that. Many families need higher incomes or financial assistance before they can buy the proper foods.

How to get proper food to the millions who need it and can't afford it is the major problem in nutrition today—and the hardest to solve. But in the meantime there is much to be done along the educational front. One of the first educational jobs is to convince everyone, irrespective of income, that attention must be given to the preparation and storage of foods.

The directions in the chart below for cooking and storage practice in the home take into account water solubility and instability of vitamin C and the B vitamins.

Guide For Cooks

Here are 10 ways to avoid a loss of vitamins and minerals in preparing foods



- 1. Cook foods as quickly as possible.
- Use small amounts of water and use any that is left after cooking. Cooking liquid contains considerable amounts of vitamins and minerals. Special utensils are not necessary for so-called waterless cookery.
- 3. Do not peel potatoes or fruits and then cut them up and let them stand before cooking. Cooking them whole and with the outer covering on helps preserve vitamin content.
- 4. Never add soda to vegetables during cooking. It serves no useful purpose and makes for destruction of vitamins. Cook green vegetables in an open kettle and they will stay green.





- 5. Don't stir air into fruits and vegetables while they are cooking.
- 6. Serve foods as soon as possible after they are cooked.
- 7. Store foods at low temperatures and in closed containers.
- 8. Do not chop or crush fresh fruits and vegetables and allow them to stand. They lose vitamin C rapidly.





- Frozen foods have practically the same vitamin content as fresh ones. But care must be taken to conserve it during preparation. Do not defrost and then allow to stand. Do any cooking required while they are still frozen and use all of the liquid.
- 10. Canned foods retain vitamin value well, with the possible exception of vitamin C in some cases, provided they have not been stored too long. To obtain full value, use the entire contents of the can including the liquid. Canned foods are cooked foods and should be treated accordingly.

² The chart may be obtained from the Committee on Food and Nutrition, National Research Council, Washington, D. C.

GENERAL SECTION

CONSUMER NEWS AND INFORMATION



The New Tax Bill

... does nothing to correct the unfairness of our present tax structure. Instead, it seems to point towards the most regressive of all taxation—a general consumption tax

A discussions, the Ways and Means Committee on July 29 recommended a new tax bill to the House of Representatives.

Although the bill has the greatest importance for consumers and the low-income groups of the population, and therefore requires careful consideration, the Rules Committee sent the measure to the floor of the House under a special "closed rule." This shut off all debate on possible amendments except those approved in advance by a majority of the Ways and Means Committee."

As undemocratic as the means used to push the bill through the House are the new taxes themselves. Their touch is relatively light on corporate and large individual incomes, which are being built up greatly by the defense program and should be made to carry their share of that program's cost. There is no question that the new taxes will lower the standard of living of great numbers of consumers by increasing prices of consumption goods and by raising the personal taxes of the low- and middle-income brackets.

Arguing that general amendments on the tax measure shouldn't be permitted, Chairman Doughton of the Ways and Means Committee declared that "a bill of the magnitude of the tax bill we have presented cannot safely be written or rewritten on the floor of the House."

There's just a possibility that sponsors of the bill feared that general discussion might let too much light into the dark corners of their recommendations. Of the \$3,529,000,000 to be raised by new taxes, only 35%, or \$1,322,000,000 will come from corporations, while 60% or more than \$2,000,000,000 will be contributed by consumers principally in the low- and middle-income groups through direct personal taxes and indirect commodity taxes. An insignificant 5% will come from increased estate and inheritance taxes.

One of the most striking features of the bill is that it takes a step in the direction of a general sales or consumption levy. It increases commodity taxes by \$900,000,000—and this on top of a \$375,000,000 increase enacted in the Revenue Act of 1940.

With no consideration for the small income consumer, the Committee blithely raises rates on tires and tubes, automobiles and radios, movie tickets and matches, telephones and refrigerators; and levies new taxes on soft drinks and household electrical equipment. These can scarcely be called luxury items. A worker may not be able to get to his job without a car because he has to commute 20 to 100 miles owing to a housing shortage in defense towns. Yet a "use tax" of \$5 is indiscriminately levied on automobiles, yachts and airplanes.

The migratory worker's "jalopy" and the rich man's yacht seem to be equal in the eyes of the Committee.

The bitterest pill to swallow is the Committee's total disregard for the possibilities of getting taxes from the groups profiting most from the defense program—the large corporations. Nor do the Committee's proposals plug the loopholes in our present tax structure which permit the notorious tax evasions in the high-income brackets.

No attempt was made to establish an effective excess profits tax, and no undivided profits tax was provided for. The great majority of government securities are left tax exempt, and gift and inheritance taxes are still full of loopholes. Increases in taxes on large incomes are entirely out of proportion to those put on low incomes. For instance, taxes on incomes below \$5,000 are increased in some cases 200% and more, while increases in the \$100,000 income class amount to less than 25%.

The only deference the Committee made to an equitable tax program was a 6% surtax on corporation earnings above \$25,000 and a single joint tax return for families—which the Senate is expected to turn down. The Committee wouldn't hear of the Treasury's proposal, endorsed by President Roosevelt, to tax all excessive profits.

The Committee tried to whitewash its inequitable proposals by arguing that "due consideration was given to the economic and social effects of the proposed levies. There was continually in mind the need for keeping to a minimum, consistent with our defense efforts, any disruption of our economy, and at the same time supplying a needed restraint on inflationary tendencies."

But the Committee means to put a brake to inflation by crippling purchasing power (and living standards) with heavy consumption taxes. They thereby endorse a method of combating inflation with scarcity.

The better way of checking inflation is to expand production and stop speculative price rises. It involves a planned program of expanded production of consumers' goods, price stabilization in the interests of consumers, and placing the tax burden where it belongs.

As Bread & Butter, CU's weekly, has shown in detail in recent issues, all of this could be done without interfering at all with the defense effort and would, in fact, strengthen it. But our legislators don't seem to be willing to take the necessary steps.

The most dangerous angle of the tax bill is that it will probably serve as a model for future defense tax legislation. Consequently, increasing the inequability of the present tax structure may mean that its unfairness will be perpetuated for a long time. And the heavy consumption taxes proposed this year may easily be a springboard for a general consumption tax next year.

Indeed, Chairman Doughton has clearly expressed the goal of his committee: "This does not close the door (to further taxation). There will be another tax bill, possibly reducing income tax exemptions or imposing a general consumption tax."

The sad paradox of the bill is that it

¹ As we go to press, some Congressmen are objecting to this high-handed procedure. That their protests will get the rule changed, however, seems doubtful.

sabotages the defense effort insofar as it harms the living standards of consumers and the low-income groups who make up the bulk of the population. Investigations have shown, for example, that a 3% sales tax hits families who live on narrow margins approximately 60 times as hard as families in the very high-income brackets. Thus, if the Committee proposals for consumption taxes are adopted, millions of families won't be able to maintain even their present low standard of living. And national health and energy, vital in a crisis, are bound to suffer.

The bill will probably be jammed through the House while we are going to press. But the Senate will still have a crack at it. CU urges its members to write their Senators now and call on them to refuse to approve tax increases on any commodities except proven luxuries. Ask that the tax burden be distributed fairly among groups according to the democratic principle of "ability to pay," as requested by President Roosevelt.

Reports in Progress

Work on the following reports, among others, is either now under way or scheduled to begin shortly:

Cigarettes
Canned Kidney Beans
Red Sour Cherries
Diapers
Radio-Phonograph
Combinations
Shaving Creams
Vacuum Cleaners
Cleaning Powders

WITHOUT RATINGS

Cooking Utensils

The Nation's Phone Bill

... will be cut \$14 million annually by AT&T's "voluntary" reduction in toll call rates. But it won't mean much to the average consumer. A look into rate-making problems is what's needed

A GOVERNMENT appropriation for purposes of regulation generally has a healthy effect on a public utility. The July 10 reduction in long-distance telephone rates (which will mean an estimated saving to consumers of some \$14,000,000 annually) is the sixth in a series of rate reductions since 1935 which have followed—almost like an appeasement program—each governmental threat to AT&T's financial peace of mind.

This newest cut was preceded last Fall by an appropriation of \$126,000 for telephone regulation, and by an allowance in the 1941-42 budget of \$150,000 for the same purpose.

Net profits on toll calls rose from \$20,-160,763 in 1938 to \$27,217,438 for the year ending January 31, 1941, in spite of a \$5,000,000 reduction of rates in the interim. On the company's figures, the rate of profit on toll operations increased in that same period from 6.39% to 8.89% on net investment—a rate considered somewhat generous for a public utility—"despite increases in allowances for pensions, depreciation and maintenance expenses and federal income taxes."

In view of these facts the Federal Communications Commission on April 1, 1941, issued an order directing the AT&T and its 21 affiliated companies to show cause why toll rates should not be reduced. A hearing was scheduled for June 9 to work out a sound basis for setting rates.

When, early in June, the telephone company announced a "voluntary" reduction in its charges and, at the same time, the scheduled hearing was cancelled, the chances for a good look into rate-making problems went down sharply.

While the recent settlement doesn't preclude the possibility of working out a rate-making procedure at some time, still no action is likely to be initiated for at least another year, and probably not until after the national emergency has been called off.

In its brief the telephone company, while admitting the increase in its profits,

claimed that this was an abnormal condition due to a tremendously increased use of pre-defense facilities. More to the point, argued the company, it has made a practice of maintaining a plant margin "just in case" and additional facilities will have to be built in keeping with this policy. Taxes and higher wages, it said, would further cut into profits.

And yet, these tenuous profits were voluntarily cut by approximately \$14,000.000.

In a way, the very fact of this sizable voluntary cut under present conditions makes one wonder if the Commission was right in agreeing to it at the sacrifice of some more permanent understanding. Certainly such benefits as accrue to the public are limited mainly to businesses.

M ost of the toll calls made by private individuals are "short lines" calls—40 miles or less. Few of us make any appreciable number of "long lines" calls in a year. But the reductions, ranging from 5¢ to 25¢ on a call, apply only to calls where the airline distances involved are over 144 and less than 1530 miles.

Also, less than half of the reduction (\$6.170,000) applies to message rate calls. The major portion affects personto-person overtime charges and report charges—costs which involve the average phone user relatively little. Telecommunications Reports in its June 4 issue declares: "This is significant for the telegraph companies because it means that their present rates do not encounter such stiff competition as if the entire reduction; was impacted on message charges."

With the FCC apparently unwilling to push its advantage to a logical conclusion—at least at the present time—consumers will have to look to their state public utilities commissions for more immediate benefits. While states' rights and the AT&T seem worlds apart, the jurisdictional problem constantly recurs in ratemaking. A few state public utilities commissions (notably those in Pennsylvania and Michigan) have followed through on inter-state toll-rate reductions and gained corresponding cuts on intra-state rates.

In such cases, the state commission (prodded, perhaps, by an alert consumer group) can issue the usual "show cause" order, set a date for a hearing, and then proceed to negotiate a more equitable rate schedule. We urge consumers to put the procedure to the test in their own states.

Until final adjudication of basic ratemaking problems, however, state commissions are substantially helpless in dealing with local exchange rates. And these rates constitute the bulk (about 80%) of the telephone company's business.

See the rate reduction chronology in Moritz Howard's article in the April, 1940 Reports. The FCC announces that the newest rate cut brings "the total of negotiated savings to the public in telephone tolls during and since the Special Telephone Investigation of 1935–38 to more than \$45,000,000 annually." Ironically, telephone taxes just proposed by the House Ways & Means Committee (see page 217) are estimated to add much more than that to phone bills.

Are Frozen Foods Good Buys?

Not for general use by low-income families, members of a Maryland cooperative discover. CU presents an account of a unique investigation of a kind which could be undertaken by many consumer groups

Are frozen foods good buys for consumers in the low-income brackets? To find out for themselves, a group of interested consumers a few weeks ago made their own investigation and came to their own conclusions. The question arose in a way that was probably unusual, but it was answered in a way open to any group of price- and quality-conscious people.

The investigation was made in Greenbelt, Maryland, a low-cost Government housing project for families having a salary between \$1,200 and \$2,200 per year. Some housewives in the town had requested that the grocery store, a consumer cooperative, sell frozen foods.

But the Board of Directors of the cooperative discovered that it would be necessary to buy an expensive refrigerator-cabinet for storing the frozen foods; and that the high cost of the cabinet, together with the possibility that the townspeople's low incomes would prevent any extensive or regular buying, made the stocking of frozen foods a considerable risk.

Instead of guessing, or taking a chance, or creating a market by advertising, the cooperative conducted a test to determine whether the patrons of the store really wanted frozen foods, and could afford to buy them. Significantly, since it was a cooperative, the patrons did the testing.

The educational committee of the co-op, together with 78 women representing about 10% of all the families in the town, tested frozen, canned and fresh vegetables for comparative cost, taste and preparation time. Frozen fruits were tested for taste alone.

During February and March 1941, the women met in each other's homes and compared samples of frozen spinach, lima beans, peas, asparagus, and broccoli—all contributed by a frozen food producing company—with samples of canned and fresh varieties of the same vegetables, taken from the co-op grocery store. (Canned broccoli wasn't available, however, and fresh asparagus wasn't in market.) The women cooperated in cleaning, weighing, cooking, and tasting the vegetables, acting as timekeepers and working on the computations.

by ELLA G. ROLLER

Mrs. Roller, the author of this article, is a member of the Educational Committee of the cooperative store at Greenbelt, Md., under whose guidance the frozen food investigation described here was made.

The routine followed in testing spinach is a good illustration of how these consumer-testers went about their job with all the vegetables.

The contents of a package of frozen spinach and equivalent amounts of canned and fresh spinach were weighed and the costs noted.

While one woman cleaned the fresh spinach, another checked the time required to do it—in this case, 12 minutes. After the spinach was cleaned it was weighed again. The testers found that 5 oz. had been lost through wastage of withered leaves, roots, &c.

The three types of spinach were then cooked, drained, and weighed again. This second weighing was very important, since it is the cooked, drained food that is actually eaten. The cost per ounce of the food at this point is what is most significant to the housewife.

It was found that the cost of 16 oz. of cooked-and-drained frozen spinach was 27¢, while the cost of the same amount of similarly prepared canned and fresh spinach was 16¢ in both cases.

To supplement these cost findings, taste tests were made. Each woman was given a plate containing separate and keyed portions of frozen, canned, and fresh spinach. She tasted the samples and indicated her preferences on a questionnaire. Results showed that the women liked the taste of fresh spinach most, frozen next, and canned least.

GENERAL RESULTS OF TESTS

The general results of the tests on all the vegetables were highly illuminating. In addition to information on comparative costs and tastes the women gathered valuable facts about relative loss of weight and preparation time.

They found that it took from 8 to 35 minutes to clean each fresh vegetable, an average of 15½ minutes. No preparation was required for frozen or canned foods, of course. There was little wastage in frozen foods; the loss of weight was practically negligible with the one exception of asparagus, which decreased 40% in cooking.

There was greater loss in canned goods—from the uncooked to the cooked stage—chiefly because of the packing fluid in the can. The variation in this fluid from brand to brand and can to can of the same brand indicated to the women the need for informative labeling on canned goods, so that the amount of solid would be stated on each can.

In general the greatest variation in weight loss was found in canned spinach, one sample losing 33%, another only 11%. Average losses for the other canned



GREENBELT COOPERATIVE GROCERY

Man bites dog: the members saved the store some money

AS a sidelight on the cooperators' findings, described in the accompanying article, CU reprints below a summary of its own evaluations of the "freezability" of various foods from the January 1940 REPORTS:

Vegetables. Better than fresh product unless latter is fresh picked: peas, corn. Almost indistinguishable (when cooked) from the cooked fresh product: string beans, lima beans, spinach. Broccoli freezes well. Cauliflower is satisfactory, but not important because of the availability of the fresh product throughout the year. Green beans are generally good, if the beans frozen are tender and free of woody tissues. Asparagus is likely to collapse badly on thawing, but after cooking usually compares favorably in appearance and flavor with the cooked fresh product. Vegetables customarily eaten

raw do not freeze well; lettuce, tomatoes, cucumbers, onions are unsatisfactory.

Fruits. Most difficult foods to freeze. Nearly all frozen fruits need sugar-packing and even then frequently give poor results.

Meats. Generally good, although fresh meat is probably a better buy in most cases.

Poultry. Generally good; decidedly superior to "cold storage" poultry.

Fish. Better than most fresh fish, except for persons living near seaboard. Unfrozen fresh fish deteriorates very rapidly.

vegetables were 26% for lima beans, 31% for peas, 34% for asparagus.

The women discovered two important facts about loss of weight in fresh vegetables: (1) they were subject to a greater loss than either canned or frozen types, owing to the presence of shell, roots, &c.; (2) there was considerable variation in this loss for the same vegetable because of variations in the quality of the vegetable. In the case of fresh spinach, for instance, one sample shrank 52% while another shrank only 17%.

Because of this wastage—especially in spinach, lima beans, and peas—fresh vegetables aren't always an economical buy, the women decided, although the original price may seem cheap. If you happen to get a supply of lima beans with waste, you'll find that the price of what you actually eat is very high.

Consequently, the Greenbelt women

found that canned vegetables, all things taken into consideration, were least expensive per edible unit. Fresh vegetables were next in the scale, and frozen foods most expensive. Where strict economy had to be observed, they concluded, canned goods were the best buy.

Frozen foods rated for the most part as luxuries, except in the case of lima beans and perhaps peas. For during the winter time when prices of these fresh vegetables were high, it was sometimes cheaper to buy frozen foods. (Because the tests were made with winter prices of fresh vegetables, the women later got summer retail prices and compared them with the prices of canned and frozen vegetables. They found that fresh vegetables in season were much cheaper than frozen or canned vegetables.)

Taste tests revealed that, as in the case of spinach, most of the women put fresh vegetables first, frozen vegetables next, and canned vegetables last. There was one exception: most of the women preferred the taste of canned asparagus to that of frozen asparagus.

When frozen fruits were tasted, most of the women liked the flavor, but considered that their high cost confined their use to special occasions.

The final conclusions reached by these amateur testers were that while frozen foods saved time in preparation and their taste was generally good, the cost per edible unit was much too high for a low-income group.

Consequently, the Education Committee recommended that the cooperative should not try to sell frozen foods under the prevailing prices.

The significance of this experiment, CU believes, is not so much in the specific results that came from the testing. More important is the example the experiment sets for groups which want to find out the facts about what they buy before they buy it. We agree with the opinion expressed by The Cooperator, Greenbelt weekly newspaper:

"This work . . . provided a sound democratic basis for decision as to whether to purchase frosted foods equipment with the funds invested by the members in their cooperative. The ability to hold such tests in the homes of its patrons, and thereby to determine the patrons' interests and demands, is a unique advantage of a cooperative."

But consumer groups of all types can undertake just such projects, and CU urges them to consider doing so in their own interests.

What the Co-op Testers Found

THE table below shows comparative data for some of the vegetables tested by members of the Greenbelt co-op in their investigation of frozen foods.

FROZEN WEIGHT COST			CANNED WEIGHT COST				FRESH (Winter Prices) WEIGHT COST						
KIND OF VEGE- TABLE	WEIGHT WHEN PUR- CHASED (Ot.)	COST WHEN PUR- CHASED (e)	AFTER COOK- ING AND DRAIN- ING (Oz.)	PER 16 OZ. OF READY- TO-EAT FOOD (#)	WEIGHT WHEN PUR- CHASED (Oz.)	COST WHEN PUR- CHASED (#)	AFTER COOKING AND DRAIN- ING (Oz.)	PER 16 OZ. OF READY- TO-EAT FOOD (¢)	WEIGHT 1 WHEN PUR- CHASED (Or.)	COST WHEN PUR- CHASED (¢)	AFTER COOK- ING AND DRAIN-	PER 16 OZ. OF READY- TO-EAT FOOD (¢)	MOST ECO- NOM- ICAL BUY
Spinach	14	25	14	27	18	14	14	16	24	12	11.5	16	Fresh and
	14	23	13	29	18	14	12	19	24	12	17	11	Fresh
	14	23	13	29	18	14	16	14	24	14	20	11	Fresh
	14	23	13	28.4					24	15	16	15	Fresh
Lima Beans	12	27	10	43	20	14	14	16	32	33	11	48	Canned
	12	27	14	31	18	14	14.5	16	45	46	16	45	Canned
	14	27	13	33	20	14	15	15	45	48	16	42	Canned
	12	27	12	36	20	14	14	16	45	48	17	46	Canned
Peas	12	23	11	33	20	13.5	14	15.5	32	19	14.5	21	Canned
	12	23	12	30	20	15	13	18	32	25	12	33	Canned
	12	25	12	33	20	15	14	17	32	25	10	40	Canned
	12	25	12	33.3					32	29	13	35.6	Canned

¹ The purchased weights of raw fresh vegetables were selected to conform to the table of equivalents printed on frozen food packages.

Some Rules for **Buying Insurance** DO YOU KNOW THEM?

THE June issue of Your Invest-ments (publication of American Investors Union) tells you how to plan your insurance estate. It gives you some simple rules which help you get the most for your insurance dollar.

In the same issue: Installment Investment Plans: A Sinkhole for Savers: Federal Savings and Loan Associations: Economic Review of the Month; Books for Investors.

The March issue, still available, warns you of the dangers of investing in Federal Savings & Loan Associations . . . other articles on Mutual vs. Stock Insurance Companies; Securities and Security Below the Rio Grande; Does Home Ownership Pay Profits?

Single issues of Your Investments are 50c. But you can get three issues together from CU for just \$1. This offer covers both issues described above plus any of the following four.

VOLUME I (1940)

- No. 5: Special Savings Bank Number: "Shopping" for a Savings Bank— Survey of Financial Condition and Interest Rates of Banks
- No. 8: Special Stock Analysis Number: Statistical Analysis of 215 Stocks Which Have Paid Dividends for 10 or More Consecutive Years

VOLUME II (1941)

- July: The Jones & Laughlin "Merger"— Carnegie Corporation of New York: Its Investment Policies from 1929 to 1940-The American Tobacco Company Case
- August: Which Stocks Do the Experts Buy?—What Rights Do Preferred Stockholders Have?

USE THE ORDER FORM ON THIS PAGE

Labor Notes

PORTABLE TYPEWRITERS

THE LAST time CU reported on labor conditions in the portable typewriter industry (November 1937), only one of the principal four brands was made under union conditions. And conditions haven't changed much in four years.

Today Underwood, Elliott, Fisher Co. is the only typewriter company which has a contract with a union. As the result of a five-weeks' strike the company recently entered into a written agreement with the International Association of Machinists (AFL) and the Metal Polishers, Buffers, Platers and Helpers International Union (AFL). The agreement covers employees at Underwood's Hartford plant, where the company states, all of its typewriters are manufactured.

The agreement provides, according to union officials, for the reinstatement of striking employees without loss of privileges. It establishes an 8-hour day, 40hour week, with time and a half pay for overtime work. Seniority regulations were set up, and all employees on the payroll as of November 1, 1940, got one week's vacation with pay. In addition, a small general wage increase was obtained.

According to the Machinists Union, the plant of L. C. Smith and Corona Typewriter, Inc., is not organized. The Royal Typewriter Co. has an independent union which is "regarded as a company union" by AFL officials.

Remington Rand, Inc., much in the public eye for their notorious strikebreaking activities at the time of CU's last labor report on typewriters, is still having difficulties as a result of its labor policies. The company was recently cited for contempt of court for refusing to obey a U.S. Circuit Court order upholding a National Labor Relations Board ruling. The NLRB had ordered Remington Rand to stop antiunion activity and interference with AFL unions' attempts to organize the company's plants.

In an NLRB election held the first week in June, the United Electrical, Radio, and Machine Workers of America (CIO) received a majority vote from the employees of the Remington Rand Tonawanda plant. This, of course, obligated the company to bargain with the union and attempt to reach an agreement. However, according to officials of the UERMWA, no contract has been drawn up vet.

None of the companies answered CU's requests for information on labor condi-

tions and relations.

[continued on page 222]

FREE "WAR & THE CONSUMER" A New Discussion Outline

- Around American dinner tables, and at store counters, prices are discussion topic No. 1 today. Your friends and neighbors notice the changes in price and quality, wonder what to do about them. Your club, co-op or trade union is looking for guidance for its members.
- CU's new discussion outline, WAR & THE CONSUMER, will help provide the guidance so necessary to an understanding of what's happening; will enable you to discuss consumer problems helpfully whether you're talking to a few friends or to a large audience.
- It analyzes major changes war has brought to consumers, explains what they can do to help themselves. Ten pages, mimeographed. Free on request.

CONSUMERS UNION,

17 Union Square, N. Y. C.	
Please send me your new discussion line, WAR & THE CONSUMER. I'd also	
CU circulars for people.	
NAME	
ADDRESS	

CONSUMERS UNION

17 Union Square W., N. Y. C.

I am enc	losing	\$ 	for	which
please se				
checked	below:			

- Special Combination Offer-
 - 'Look Before You Cook," "Good Health & Bad Medicine," "Our Common Ailment,"
 - "Wines & Liquors."-Price to CU Members-\$3.
- ☐ "How to Buy Furs"-50c.
- ☐ The following three numbers of "Your Investments" (see ad on this page) .- \$1.
- ☐ Bound Volumes, 1936-37, 1938, 1939 -each \$2. 1940-\$2.50. (Check
- ☐ Complete Set of Volumes Ordered Together-\$7.
- Any Three Volumes Ordered Together—\$5.

NAME.....

ADDRESS....



CU's Buying Guide is no bookshelf ornament. Make it work. In this space we will remind you now and then of timely Buying Guide material

• We note that Mrs. Roosevelt has just bought a bicycle to save fuel. Prices on bicycles are going up, so if you need one, or plan to give any as Christmas gifts, buy it now. Consult

BICYCLES Page 320

• If you're taking a late vacation and haven't bought your camera and equipment yet, be sure to check

CAMERAS Page 305 PHOTOGRAPHIC EQUIPMENT

Page 310

17 Union Square W., N. Y. C.

I enclose \$3.50 for which please

- ☐ Enter me as a member of Consumers Union and send me the Reports for one year.
- Renew my membership for one year.

I enclose \$4 for which please

- ☐ Enter me as a member and send me the Reports and Bread & Butter for one year.
- Renew my membership for one year and send me Bread & Butter to run concurrently with the Reports.

I enclose 50¢ for which please

Send me Bread & Butter for the duration of my CU membership (up to one year).

I enclose \$1 for which please

Enter my subscription to Bread & Butter for one year.

I agree to keep confidential all material so designated.

NAME

ADDRESS

(continued from page 221)

MEN'S UNDERWEAR

NION organization is spreading in the men's underwear industry. Only one brand of shorts was listed as union-made last year; this year you can take your choice of six.

Non-union shops pay the Wage-Hour minimum of 321/2¢ an hour, but the minimum wage is apt to be pretty close to the maximum, the union claims. Paid vacations are unheard of, according to the union, and workers are often fired without regard to length of service.

In the union shops, there's a 40¢ an hour minimum, with piecework rates which bring average earnings to over 50¢ an hour. In addition, paid vacations and seniority rights are common to all the union contracts.

The following brands of underwear are union-made, under contract with the Amalgamated Clothing Workers of America (C10):

BVD (BVD Corp., NYC). Shorts.

Manseo (Manhattan Shirt Co., NYC). Shorts and shirts.

Wilson (Wilson Bros., NYC). Shorts and shirts. Labor conditions in this plant among the best, reports ACWA.

The following are union-made, under contract with the Textile Workers of America (CIO):

Jockey (Cooper's, Inc., Kenosha, Wis.). Shorts and shirts. Average wages among highest in the industry.

Munsingwear (Munsingwear, Inc., NYC). Shorts and shirts.

The following are union-made under contract with the United Textile Workers of America (AFL):

Manhattan, Reis (Robert Reis & Co., NYC). Shorts and shirts.

The following brands are non-union:

Arrow (Cluett Peabody & Co., Troy, N. Y.). Although the Troy plant manufacturing men's shirts operates under contract with the ACWA, the Andalusia, Ala., plant where the bulk of the shorts are made operates under non-union conditions, the union states.

Varsity (Varsity Underwear Co., Baltimore, Md.). "A very low wage scale," the union advises. "They have a high labor turnover because of poor working conditions."

Aintree (Aintree Corp., NYC).

Carter (William Carter Co., NYC). The weekly minimum is \$13.40, states the company.

Hanes (P. H. Hanes Knitting Mills, Winston-Salem, N. C.).

Otis (Otis Underwear Co., NYC.). Shirt Eez, Short Eez (Superior Underwear Co., Inc., Piqua, Ohio).

Cumulative Index

Each issue of the Reports contains this cumulative index of principal material carried since publication of the 1941 Buying Guide issue. By supplementing the Buying Guide index with this one, members can instantly locate current ma-terial and keep abreast of changes resulting from new tests. Page numbers run consecutively beginning with the January 1941 issue. January, 1–28; February, 29–56; March, 57–84; April, 85–112; May, 113–140; June, 141–168; July, 169-196; August 197-224.

Reports starred replace material in the 1941 Buying Guide.

goiter129

Air conditionlodine & ing, home...127 Applesauce, Iron & anemia.101 canned 46 Aspirin 12 Autos, 1941* .. 33 -1941-42 survey ... 157 Batteries, radio185 Blankets -cotton -part wool. 5 Bleaches, household .. 22 Carbon paper. 90 Clam chowder, canned 94 Cleansing tissues* . . 74 Cold remedies, gov't action. 76 Colds —& gelatin. 24 —& vitamins 48 Consolidated Edison offer, 121 Developers, fine grain* . 61 minerals . 49, 76 Egg beaters* . 69 Fishing equipment . 154 Flashlight batteries* Flour, fortified 75 Fluorescent lighting ... 15 Frozen foods, tested by Co-op Со-ор219 Fruit juices vitamin C . 44, 64 Furniture -finishing . 47 -polishing & care... 99 --porch & garden .. 150

Gelatin

-Knox .24, 190

Group health . 132

stokers & oil

-plants ... 176

burners ..212

...210

prepared 125

-plain &

Grapefruit,

canned

Heating —coal

Knife sharpeners . 181 Knives, kitchen ... 179 Laxatives Meat grading. 78 Milk, raw & pasteurized . 131 Minerals (diet) ..49, 76 Mushroom soup, canned Oilcloth, table.160 Perfumes122 Permanent waves148 Portable typewriters .201 Pumpkin, canned 98 Radios -auto* —auto* ...119 —portable*.183 Refrigerators, 1941*145 Sheets* ... 9 Shirts, men's*. 96 Shortenings .. 208 Shorts, men's*.203 Ski equipment* 13 Slips*152 Soap, Swan & 70 Ivory ... Socks, men's* . 173 Teeth, how to brush 23 Textile finishes187 Tobacco206 Toilet tissues* 72 Toilet water .. 122 Tomato catsup* Towels, bath*. 7 Typewriter ribbons 92 Undershirts, men's 203 Vanilla extracts 67 Vitamin C. fruit juices ...44, 64 Vitamins -& colds . . 48 -& diet . . . 215 -& flour... 75 Window

curtains ... 65

The Docket

Notes on government actions against misleading advertising, false claims, dangerous products

The Federal Trade Commission has taken action against:

Clairol, Inc. and Rapi-I-Dol Distributing Corp. Together with 17 other makers and distributors of coal tar hair-dye products, these companies have agreed to stop publishing advertisements which don't contain a caution to the effect that "This product contains ingredients which may cause skin irritation on certain individuals and a preliminary test according to accompanying directions should first be made. This product must not be used for dyeing the eyelashes or eyebrows; to do so may cause blindness."

If, however, the label of the package contains such a statement with directions for preliminary testing, advertising matter need carry only: "Caution: Use only as directed on label."

The caution which the FTC has ordered placed on labels or in advertising copy is the one which the Federal Food, Drug & Cosmetic Act requires for all amine-type dyes. For information on the relative merits and dangers of various hair-dye preparations, see January 1939 CU REPORTS or the 1941 BUYING GUIDE.

Firestone Tire and Rubber Co., Goodyear Tire and Rubber Co., B. F. Goodrich Co., Sears, Roebuck & Co., and Western Auto Supply Co. The FTC charges that these companies, all of them of major importance in the tire industry, have advertised during nationwide and local sales that savings could be made by buying tires at prices below regular retail list prices. According to the FTC, these savings were merely alleged, since they were based not on the regular retail selling price but on higher and fictitious prices. The Commission also found that the companies advertised savings over competitors' list prices, although these were not the regular retail prices of the competitors' tires.

The five companies have been ordered to cease representing, among other things, that any specified amount is the customary or regular price of a tire or tube advertised when the amount isn't really the actual selling price; that any amounts or percentages are savings or discounts when they're not computed on actual selling prices.

Hy-Phen Corporation, successor to Bradley's Laboratory, Inc. The Commission charged that the company has represented in newspaper and radio advertising that its preparation Hy-Phen will prevent and cure colds, and provide effective treatment for toothache, neuralgia and other pains.

The Commission found these claims to be false and misleading. It found that the preparation affords only temporary relief from some symptoms and that it has no curative action. The FTC also found that the use of *Hy-Phen* may be dangerous since it contains drugs—acetophenetidin, caffeine, hyoscyamus.

This action on the part of the FTC comes as a much-needed follow-up to the Food & Drug Administration's recent promise to proceed against fraudulent cold cures. Since the FDA's authority applies only to labels and inserts in the packages of preparations, FTC action has been greatly needed to control false advertising of cold cures.

The Food & Drug Administration has seized:

Vita-Ray Sun-Ray Cream (Vita-Ray Corp.). The seized shipment contained labels which stated: "Just as vitamins make a healthy body, so they help make a beautiful skin. Vita-Ray Cream brings directly to your skin vitamins A and D and gives the skin a soft radiant smoothness." The FDA charges that this statement is misleading "in that the article is represented as being of superior cosmetic value" although in reality, "the presence of vitamins will not beneficially affect its cosmetic value."

According to trade journals, this action is the beginning of a move on the part of the FDA to force all cosmetic manufacturers to stop claiming that "vitaminized" products will increase the health or beauty of the skin.



"How to Buy Furs" contains 40 pages, neatly and clearly mimeographed; colorful, illustrated covers; 50c a copy.

Are You Buying A New Fur Coat?

IF you hurry, you'll be in time for the "August" fur sales which started in most stores the second week in July! And if you're in the market for a fur coat this year, you'd better do your buying now. Fur prices are on the way up. By Fall you'll have to pay more.

You may already know what kind of fur you want and you probably know about how much you can afford to pay.

But do you know how to get the most value for your money? Do you know how to judge skins and workmanship, how to guard against deception, what sort of guarantee to get, and how to take care of furs in order to get the maximum use out of them?

Information on these points is particularly important now—when prices are rising and quality standards are getting shaky.

"How to Buy Furs" was published by CU to give you such information before you buy.

This handy pamphlet brings you some vital facts about the Fur Market; contains a unique Fur Information Chart which tells you about 70 different kinds of furs—how they wear, where they come from, what is particularly good or bad about them; advises you on the care and cleaning of furs.

NOT MANY COPIES OF THIS MONEY-SAVING SPECIAL REPORT ARE AVAILABLE. ORDER YOURS NOW.



WHAT'S HAPPENING TO PRICES & QUALITY? BREAD & BUTTER GIVES YOU THE ANSWERS

THE CHART below, which shows how rapidly wholesale prices are rising, is reprinted from a recent issue of *Bread & Butter*, CU's fast-growing new weekly.

Wholesale price increases, as the days go by, will be reflected in the prices you pay at the stores. Did you know that the price picture was as alarming as the chart shows it to be?

Bread & Butter's subscribers have known it for some months now, and in terms of the specific products they buy. Bread & Butter, less than six months old, has already established itself as the outstanding spearhead in the fight against the High Cost of Living.

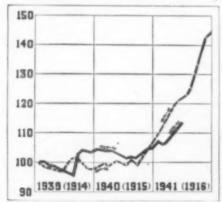
WHERE DO "BREAD & BUTTER'S" FACTS COME FROM?

Bread & Butter is straightforward, factual, unbiased, easy-to-read. Its editors gather their material from authoritative, "inside" sources; from the trade press, commodity and wholesale markets, government and industrial reports, interviews with trade specialists. That they do their job well is shown by the fact that Bread & Butter's frequent predictions as to price and quality changes have been borne out time after time.

From no other publication in America can you get the kind of information that Bread & Butter is bringing forth. Now, more than ever before, you can't afford to miss it!

WHAT DOES "BREAD & BUTTER" DO?

Week by week, it tells consumers what the price picture is as it affects the products they buy from day to day. More than that, it tells what forces are at work to drive prices up; gives practical down-



● This chart of wholesale prices from a recent issue of Bread & Butter shows how closely we are following the pattern of the last war. RIGHT: Sample page from Bread & Butter.

to-earth buying guidance to help consumers counteract higher prices; analyzes what's happening in readable, penetrating reviews-of-the-week; points to concrete ways in which consumers can take action

Many price increases are not apparent to the consumer. The quality of this, or the quantity of that, is reduced—and with never a word to those who buy. At the top of the page is reproduced a clipping from the New York Times of July 10, 1941, showing the kind of thing that's going on. Bread & Butter keeps track of these product changes . . . warns its readers what to look for.

NEW PRICE LINE DUE IN CHEAP DRESSES

Some Houses to Drop \$2.87 $\frac{1}{2}$ Bracket and Introduce

a \$3.371/2 Range

Some manufacturers of dresses in popular prices will shortly introduce a new price take at \$3.3714, abandoning their \$2.8715 lines, according to market reports yesterday, because of higher fabric and other costs. Other houses will continue to make dresses at \$2.8712, but will make savings on labor costs by reducing attiches and other details and will reduce quality to some extent by switches in quality



• BREAD & BUTTER is indispensable as a source of information for groups—Women's Clubs, Church Organizations, Trade Unions, Community Clubs—which are building a consumer program. One large consumer group includes a subscription to BREAD & BUTTER in its membership fee.

BOY THE FOLLOWING HOW, ANTICIPATING FUTURE NEEDS

Even in mind that your beyong obsculd be caseably produced by your needs and execute. Aresid recklams in including the principle of the second product in the beyong Changes in the war situations or grown ment action might shange the whole gives beaut.

and demand is large. Corned regulables from the 1940 crop are already higher priced than they were a few emitths ago and supplies are the affice fast resugh to make further price increases in

fact remogh to make further price increases in exemed goods probable. Factorist sured acres to repcible this term down a few more acres to reptables this term build matther has reduced the

crop, so far, below 1960's.

The supply of copytables for use in canning inquite largely controlled by reasons themselves, and canners have not been askings to expand. Pen canners have just been related by the Acti-Trust Division of the Department of Justice. It

continue in the production and early of categor gear.
Leat reported ever that supplies of ranned peak
ever under these of lied in at
A great deal of published has been given to
efforts of the Department of Agriculture to expend temate production 50°. This jest two e88an

So far, however, indications are that supplies will be far short of this goal. Trade papers yet heudiness like (this TEXAS CANNERS TO AVOID INCREASED TOMATO OUTPUT. If you can lose about you'll be morey sheed in the coal.

TANKLA SSTRAC

Souplies of vanish brane from Modagasear and the Frinch Eart Index are some more or loss outoff and other as aliable reserves—Section, Java and Tability—can't supply the usual nermal imparts for this countrie. Prayer are likely to be higher. Commoney Union recently based 27 brands of

I immoney Union recently tended 27 branche of tract vanille catterate and found in consultratile range or prize and quality. Tests of since branche of institution vanishing above that some of these consultrace and prize the since the same of the consultrace of the same of the same of the consultrace of the same of the same of the consultrace of the same of the same of the same of the prize for the type.

If you are partial the growing vanille extract,

Best Baye in true vession entructs note Burrer

3 custom, bost values in instation vancilies were form and Richmond at To for 2 custom. (From Cli

PROBATE JOBS AND GARLES.
If you plot to buy a versuals hands or glosse just for the flummer enames, buy it men. Stocks are low and a number of the materials used to make these things are just not evaluable to stone-facturers of containing goods.
The name is true, though probably less so, of

Cath sine was
Wagner Manufacturing Co. and Griowald illanufacturing Co. have rotted orbinishe privou on
their pre-seasoned innurance about 10°? You should ntill be able to get irreseasor of cid person
however in competitive brands if not in these
rakhen.

The criting on today helatedly set by the Office of Price Administration and Civilian Supgly a few works ago did not stop the upward novement of shoe prices.

ment of these prices.

As Women's Ween Duile to trade paper? pointed will "...pressure by retailing his lower prices on the house of the annuared histe entirely and acid me natures become monotorious had not only a minute house monotorious had no with Full historius altredo mader takes belte to be refureable to each appent."

Blue used for the Full and Winter if you can flow that the the first that the contract of the prices.

ration in the see gard of the press and trays in being send more widely as a solution for when your countries are sent more than a sent many the sent manufacturers compained that sensents in the textile tende are taking advantage of the situation.

Buyou timper of fateries, particularly species, have

CONSEMERS ENION
19 INCOM SQUARE SERV YOME
2 sections 63. Send Bread 6 Butter weakly for
1 years to

For The State is Sales a Substitute to a Primal and on the other in the control one is also take taken to

BREAD & BUTTER GROWS

Are the consumers of America taking to Bread & Butter? We'll say they are! Only 24 issues old, Bread & Butter already has more than 30,000 subscribers. They are coming in at the rate of well over 100 every day, 1000 every week! And along with orders for new subscriptions come letters from old subscribers—thanking Bread & Butter for keeping them posted on what's happening to the things they buy—telling of actual savings made and buying mistakes avoided as a result of Bread & Butter's information.

So why not you, and why not now? You can get Bread & Butter as part of your CU membership (new or renewal) for only 5te in addition to the regular \$3.50 membership fee . . . and that 50c covers 52 issues! Or you can get Bread & Butter by itself for only \$1 a year.

USE ORDER FORM—PAGE 222